PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No.:   10/098,634   Confirmation No.: 3718
Applicant(s):   Chalmers et al.
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Art Unit: 3625
Examiner: James H. Zurita
Title: SYSTEMS AND METHODS FOR INITIATING RETURNS OVER A
NETWORK

Docket No.:   18360/236825
Customer No.:   00826

Mail Stop Amendment
Commissioner for Patents
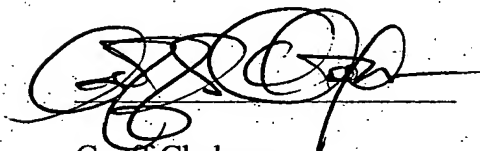P.O. Box 1450
Alexandria, VA 22313-1450

DECLARATION UNDER 37 C.F.R. § 1.132

Sir:

I, Geoff Chalmers, do hereby declare and aver the following:

1.   I am a co-inventor of the above identified U.S. patent application and a full time
     employee of United Parcel Service General Services Co. ("UPS") which is a subsidiary
     of the assignee of the application, United Parcel Service of America, Inc.

2.   I have reviewed the Exhibits referenced in the Response to an Office Action, dated
     October 10, 2006, in regard to the above referenced patent application. The documents
     are:

     a)   Exhibit A, "XML OnLine Tools, Returns on the Web, IMT 300 Architecture,"
          Document 1.0, Version 1.0.6, Date: Tuesday, February 13, 2001,

b) Exhibit B, "UPS Returns on the Web, Deployment and Implementation Procedures", September 27, 2000, Version 000927.01,

c) Exhibit C, "Developer's Guide, UPS OnLine Tools, Returns on the Web," XPCI Version 1.0001, Date March 15, 2001,

d) Exhibit D, "XML OnLine Tools, I₁ Interface Specification, Document XOLT, Version 1.0.3, Date: Monday, February 19, 2001.

3. I attest that I am the author of documents a), c), and d) listed above, and that no prior versions of these documents were created, nor were in existence, prior to the date of March 14, 2000. In regard to document b) above, I am not the author of that document and to the best of my knowledge, I do not know of the existence of any earlier versions of that document created prior to March 14, 2000.

4. I attest that prior to March 14, 2000, UPS did not offer for sale, nor offer for public use, the "Returns on the Web" service as described in the above documents.

5. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

_____
Geoff Chalmers

17 December 2006
_____
Date

XML OnLine Tools
Returns on the Web
IMT 300
Architecture

Document 1.0
Version 1.0.6

Date: Tuesday, February 13, 2001

EXHIBIT A

DRAFT

Table of Figures

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Document History

Revision	Author(s)	Date	Comments
1.0.0	Geoff Chalmers	1/3/2001	Initial document.
1.0.1	Geoff Chalmers	1/4/2001	Images locked down; Draft added
1.0.2	Geoff Chalmers	1/5/2001	Email label change from attachment to servlet link. Change History to Label Recovery
1.0.3	Geoff Chalmers	1/13/2001	Monitoring details
1.0.4	Geoff Chalmers	1/19/2001	Updated XOLT Email
1.0.5	Geoff Chalmers	2/3/2001	Add daily & weekly volume distributions
1.0.6	Geoff Chalmers	2/13/2001	

1 Overview and Goals

The Returns on the Web (ROW) project is an XML OnLine Tool that will provide a Merchant with UPS reverse logistics services at a Consumer level over the Internet. The returns market is expected to grow 12% annually in response to a) A shift in buying behavior (increased online shopping); b) Increased demands for Merchant customer service; b) Increased need for shippers to recoup salvage value from returns.

The business model of primary interest involves three actors:

Merchant – UPS' customer who wishes to facilitate returns using the Internet. These merchants will likely be both Dot Com and "clicks and mortar" retail merchants.
Consumer – The Merchant's customer who wishes to return something purchased from the Merchant.
Vendor – The destination of the returned goods. This may be a repair depot, the original manufacturer of the goods, or the Merchant itself. All of these possibilities are lumped under the term Vendor.

UPS return services in this release will be in three forms:

PRL – Print Return Label
> **PRL XML** – The return label is returned to the Merchant in the XML response
> **PRL Email** – An email with a link to the Label Recovery servlet is sent to the Consumer. When selected the link passes an encrypted parameter that drives the servlet to generate the label, which is presented in the Consumer's browser.

1A/3A – One Attempt or Three Attempt Pickup. The label is printed in the UPS center and the driver picks the package up from the consumer.

The goals of the architecture will be:

- Integrate with customer (Merchant and Vendor) systems
- Minimize external implementer effort to accelerate adoption and market penetration
- Make effective, efficient use of UPS systems and resources
- To use familiar models and design patterns

Two XML OnLine Tools will be created:

1. Returns on the Web – An XML Tool to allow the Merchant to request one of the above services plus notification emails.

2. Label Recovery – A new XML Tool will allow the Merchant to recover previously generated labels. This tool will be created from scratch and call other service components, UIS and Tracking. The servlet supporting this tool will also support email delivery.

Returns on the Web (the marketing name for ROW) has been prototyped by PRD and is currently deployed by several customers. We have studied the prototype carefully.

UPS Returns on the Web will not be offered through any other channel, including *www.ups.com*

1.1 Assumptions

1. Access to ROW will be on a special contract basis only; billing changes will not be required beyond those supplied in support of the UIS February Initiative.
2. The UPS Internet shipping team in Maryland will provide support for the "Local Print", "1 Attempt", and "3 Attempt" services for February, 2001.
3. FOSS (Label Generation Group) supports return Labels.
4. ROW will support only US50 origins and destinations.
5. The documentation, SDKs, and How-to's will be delivered via *ups.com*.
6. Developer profile for SDK will be medium to high capability Java developer at a Fortune 1000 company. This profile will be revised to a broader audience in the future.
7. ROW will only be offered as an XML Tool.
8. ROW services will not be available through the XML OnLine Shipping Tool.
9. The Merchant will be the only user of the XML Tool. The Consumer and Vendor will not contact UPS through this tool.
10. The ROW XML Tool will not be backward compatible with the Harbinger/Tandata Pilot.
11. Normal Internet email delivery latency will not impact perceived product value.
12. The current ship notification email will not be employed.
13. This is a tool: there is no user interface for this project.

1.2 Risks

Integration into Merchant systems may require Merchant process redesign at numerous levels that this product does not address.

2 Architecture

2.1 High Level Application Architecture

There will be two XML Tools:
1. Returns on the Web – Using the XML Shipping Tool source code as a base, this new tool will call on the same UIS component as the Shipping Tool for returns services.
2. Label Recovery – A new tool, Label Recovery will allow Merchants to obtain previously generated labels in case of failed delivery or loss by Consumers.

The diagram below shows the major parts of the system. Some of the parts depicted will not be development targets for this project (the Merchant Process, for instance).
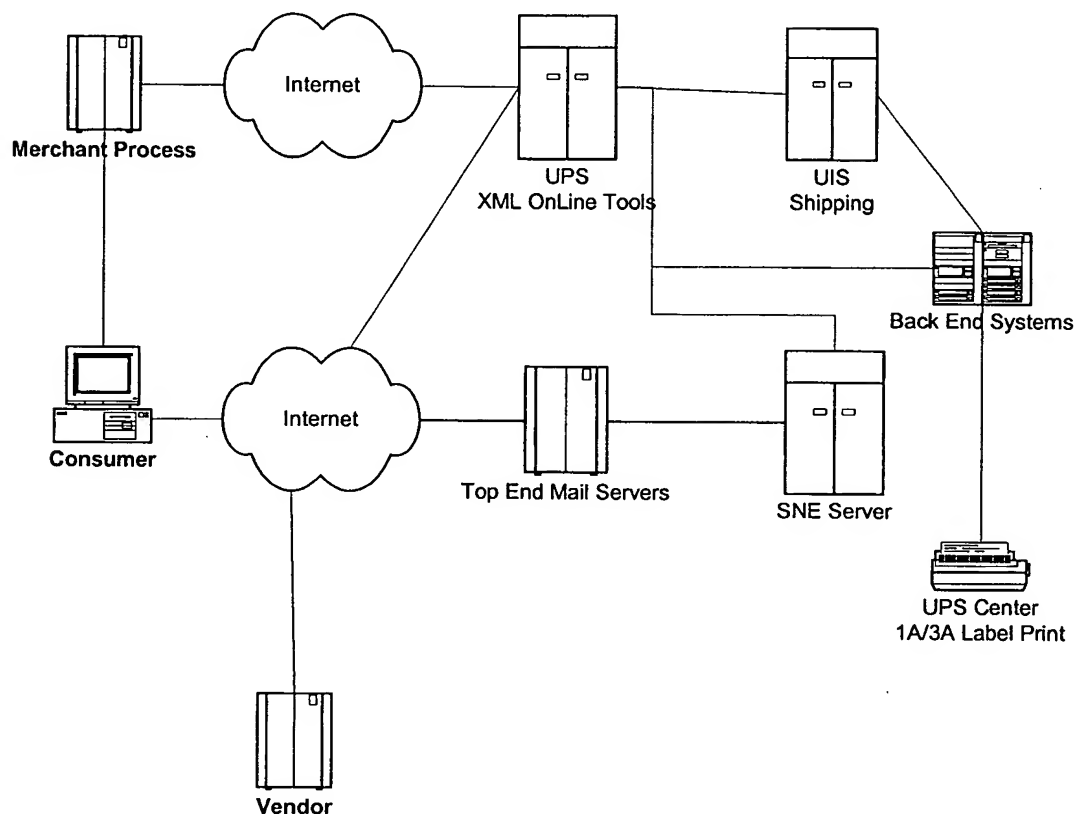
Figure 1: High Level Application Architecture

The basic process is this:
1. **Consumer**. requests a return from the **Merchant**
2. **Merchant** requests a label from **UPS**
   Or
   Merchant requests 1 Attempt or 3 Attempt Pickup from UPS
3. **UPS** delivers label to **Consumer**. via web browser (encrypted link is emailed).
   Or
   Merchant delivers label to **Consumer**.
4. **UPS** sends various emails as requested, including Return Notification to **Vendor**

2.2 Data Center Physical/Logical Schematic

Public Internet

Outer Firewall

FIREWALL

Ups Campus

DMZ

App Server
UIS - IMS

SNE Server

Local Director

Web Server

Web Server

Web Server

Web Server
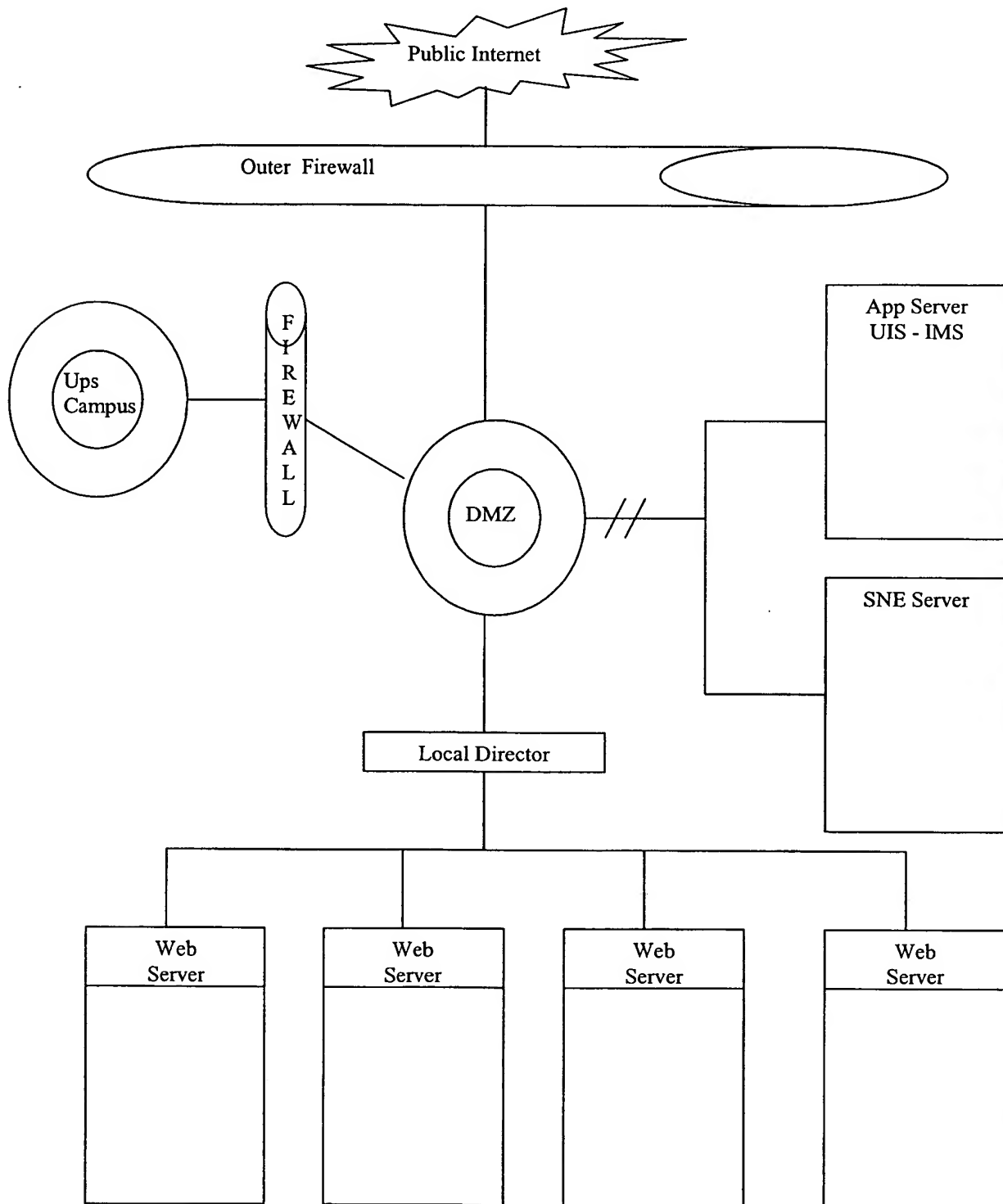
DRAFT

Figure 2: Data Center Physical/Logical Schematic

2.3 Deliverables

Deliverable	Location	Memory or Disk
ROW XML OnLine Tool Servlet	Web Tier App Servers	36 – 96 Mb
Label Recovery XML OnLine Tool Servlet	Web Tier App Servers	36 – 96 Mb
OLT Email Program	Web Tier App Servers	
ROW SDK	*ec.ups.com*	3.5 Mb Disk
Documentation and How-to	*ec.ups.com*	1 Mb Disk

2.4 Execution Environment, App Servers

JRE 1.1.6 (R4) and 1.1.8
Sapphire
XML4J version 2.0.15

2.5 SNE Required Changes

The XOLT email component will reside on the SNE servers (galileo.unix.us.ups.com and galileo2.unix.us.ups.com). It will connect with the same UPS Exchange Server as the Ship Notification process uses.

To send email and handle bounced email, the XOLT Email Component will need a mailbox similar to the "pkginfo" mailbox used by Ship Notification.

The XOLT Email Component will create logs that must be included in the log sweep process.

The XOLT Email Component will require the following be installed on the SNE servers:

JRE 1.1.8
XML4J version 2.0.15 ·
JavaMail 1.2   http://www.javasoft.com/products/javamail/index.html
JAF 1.0.1   http://www.javasoft.com/beans/glasgow/jaf.html
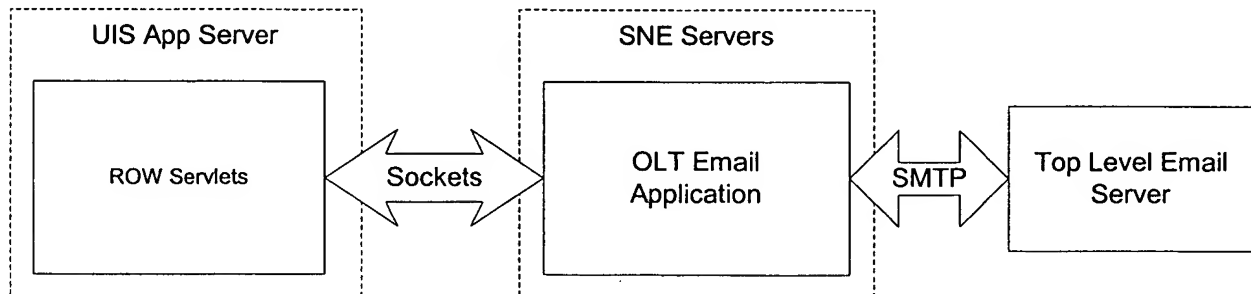
Figure 3: Email Infrastructure Overview

2.6 Process Scenarios

In general, the Merchant process requests a return service from UPS by submitting an XML request to the UPS ROW XML OnLine Tool. The tool servlet calls on UIS to create the label and upload PLD. Subsequently, based on the Merchant request, one of the following occurs:

1. The PRL label is returned in the XML response document or a link is emailed to the Consumer. The Consumer either carries the package to an UPS drop-off location on includes the package with others being picked up by the driver.
2. The 1-Attempt/3-Attempt request is forwarded by the back end systems to the centers where the label is printed. The driver attaches the label when the package is picked up.
3. Also based on the Merchant request, emails may also be sent to the vendor (Return Notification), or the Consumer (Pickup Notification).

2.6.1 Scenario: PRL XML

The Consumer contacts the Merchant and requests a return. The Merchant decides to handle the task of passing the return label to the Consumer and forwards the request via the XML ROW Tool to UPS. UPS returns the label to the Merchant via XML. At the request of the Merchant, the XML ROW Tool servlet sends a Return Notification email to the Vendor. It is expected that this scenario will occur in less than 5% of the cases.
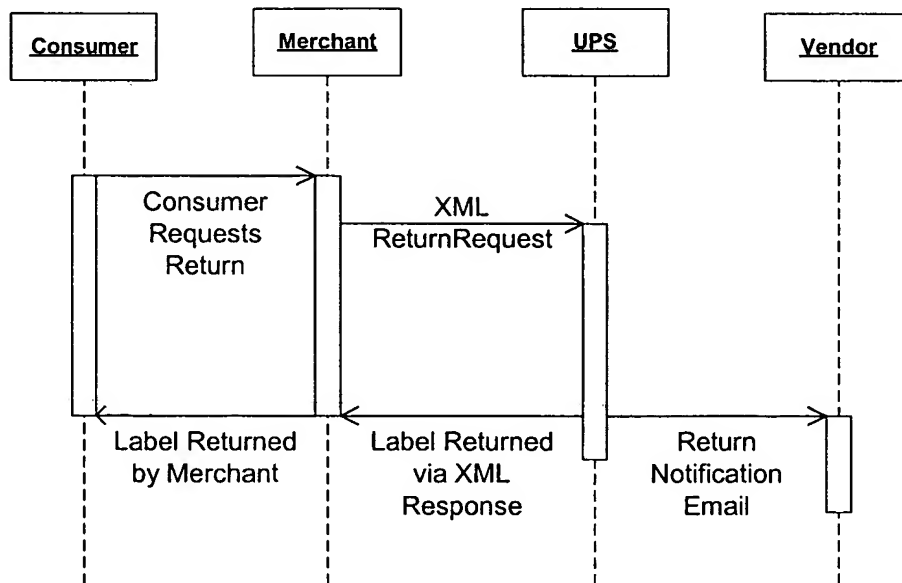
Figure 4: XML PRL Scenario

2.6.2 Scenario: PRL Email

The Consumer contacts the Merchant and requests a return. The Merchant decides to ask UPS to send a return label via email to the Consumer and forwards the request via the XML ROW Tool to UPS. UPS confirms the request via XML and emails to the Consumer an encrypted link to a servlet that will generate the label. At the request of the Merchant, the XML ROW Tool servlet sends a Return Notification Email to the Vendor.
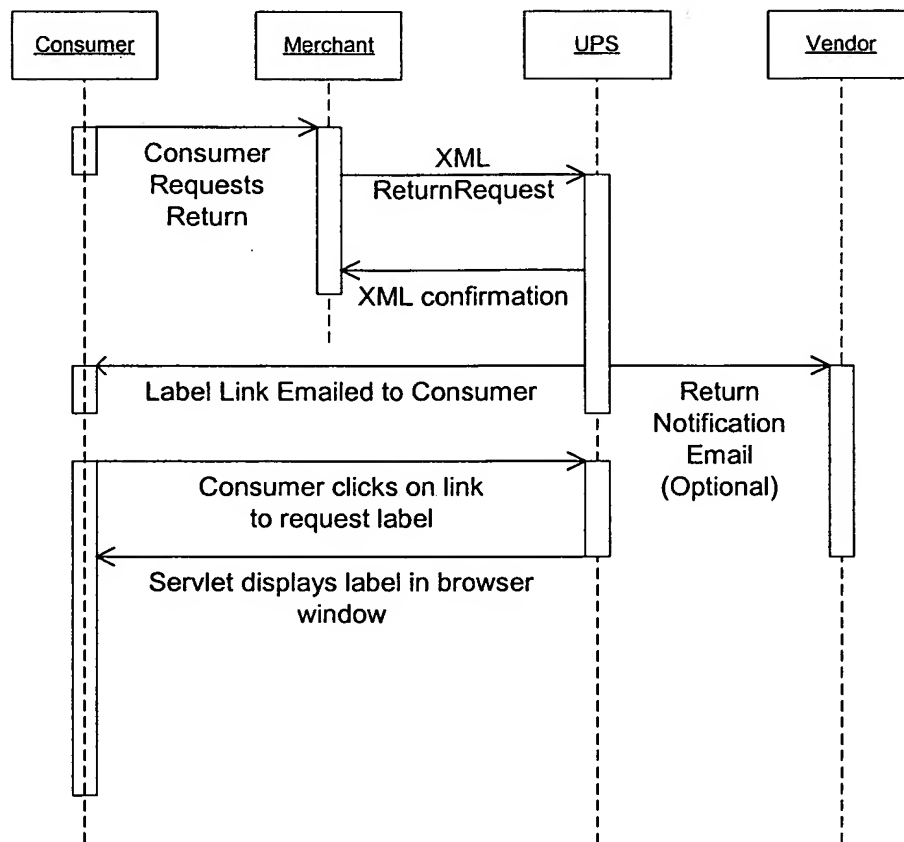
Figure 5: PRL Email Scenario

2.6.3 Scenario: 1A/3A

The Consumer contacts the Merchant and requests a return. The Merchant decides that UPS 1 Attempt or UPS 3 Attempt service is appropriate and forwards the request via the XML ROW Tool to UPS. UPS confirms the request via XML. At the request of the Merchant the XML ROW Tool, servlet sends a Return Notification Email to the Vendor and a Pickup Notification Email to the Consumer.
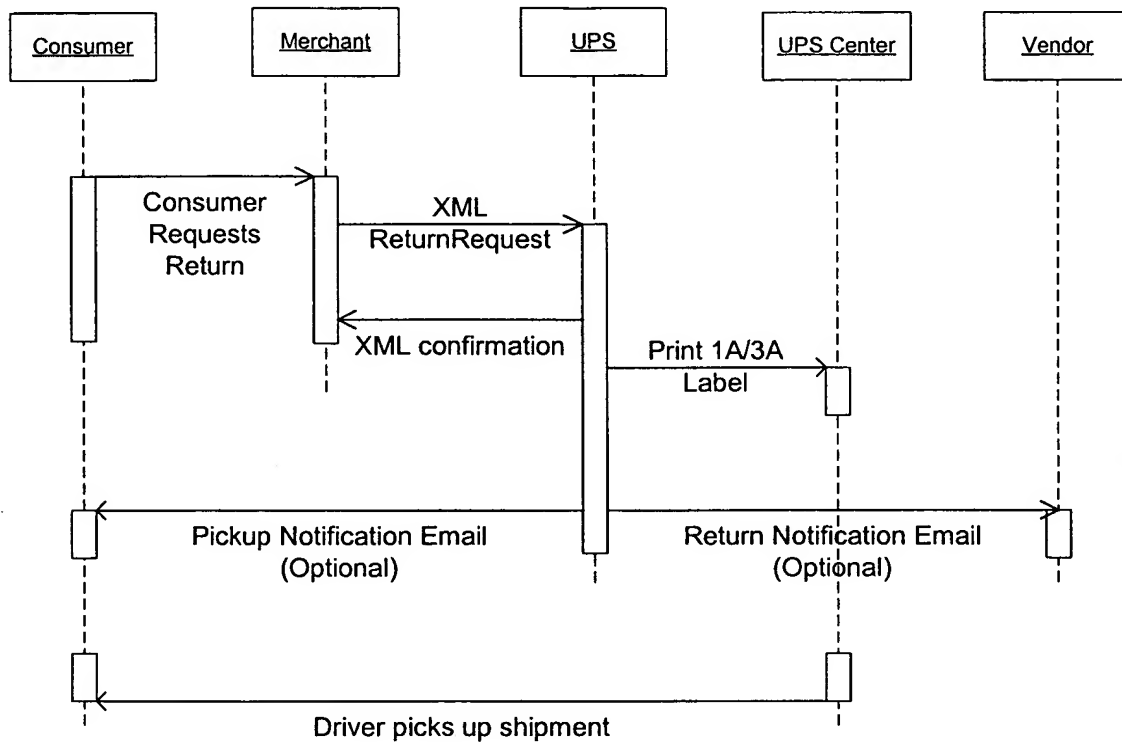
Figure 6: 1A/3A Scenario

2.6.4 Scenario: Label Recovery, XML

On occasion a customer will lose the label and call the Merchant to ask for another. The Merchant requests a duplicate label from UPS using the ROW XML Tool.
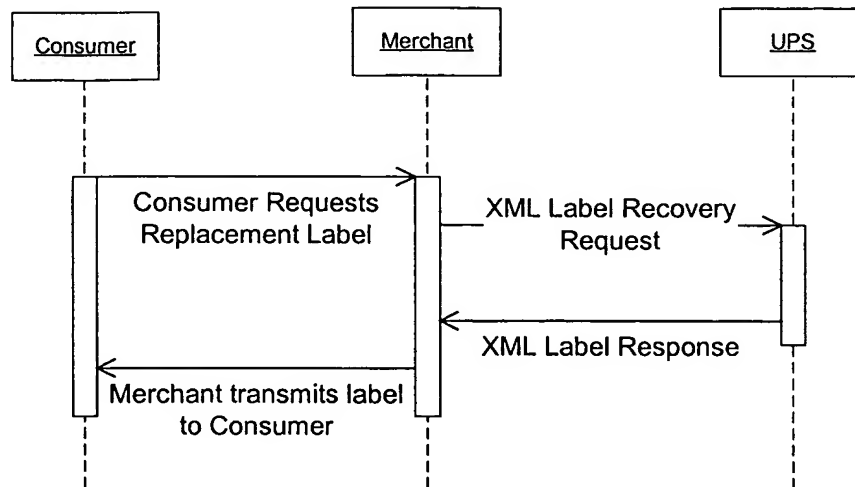
Figure 7: Label Recovery, XML

2.6.5 Scenario: Label Recovery, Email

Alternatively, the Merchant may elect to send the link to the recovered label via email.
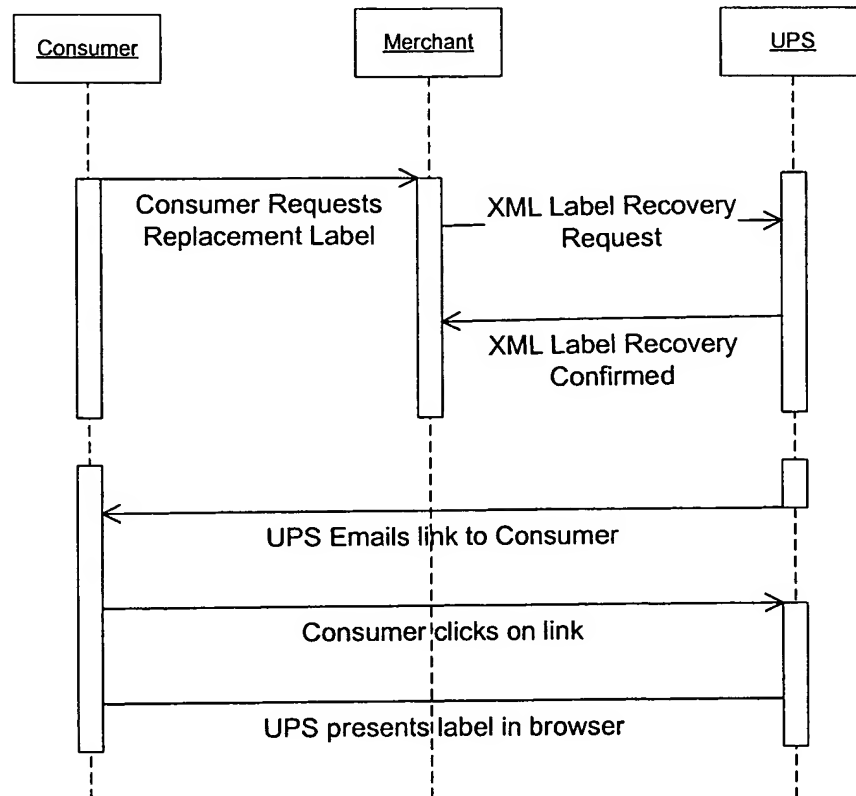
Figure 8: Label Recovery, Email

3 Components

Four separate elements will require enhancement or original development:

1. XML tools servlets, ROW and Label Recovery
2. UIS and downstream back-end systems
3. ROW SDK
4. XML OnLine Tools Email Component

- Both of these tools will be protected by Licensing and Access. The IMS tool name will be "Returns on the Web".
- Both of the servlets will use SSL for all processing, including label delivery.
- Cookies will not be employed

Component		Implementation
ROW XML OnLine Tool Servlet		Java, JDK 1.1.6 and 1.1.8
Label Recovery XML OnLine Tool Servlet		Java, JDK 1.1.6 and 1.1.8
OLT Email Program		Java, JDK 1.1.6 and 1.1.8
ROW SDK		Java, JDK 1.1.6 and 1.1.8
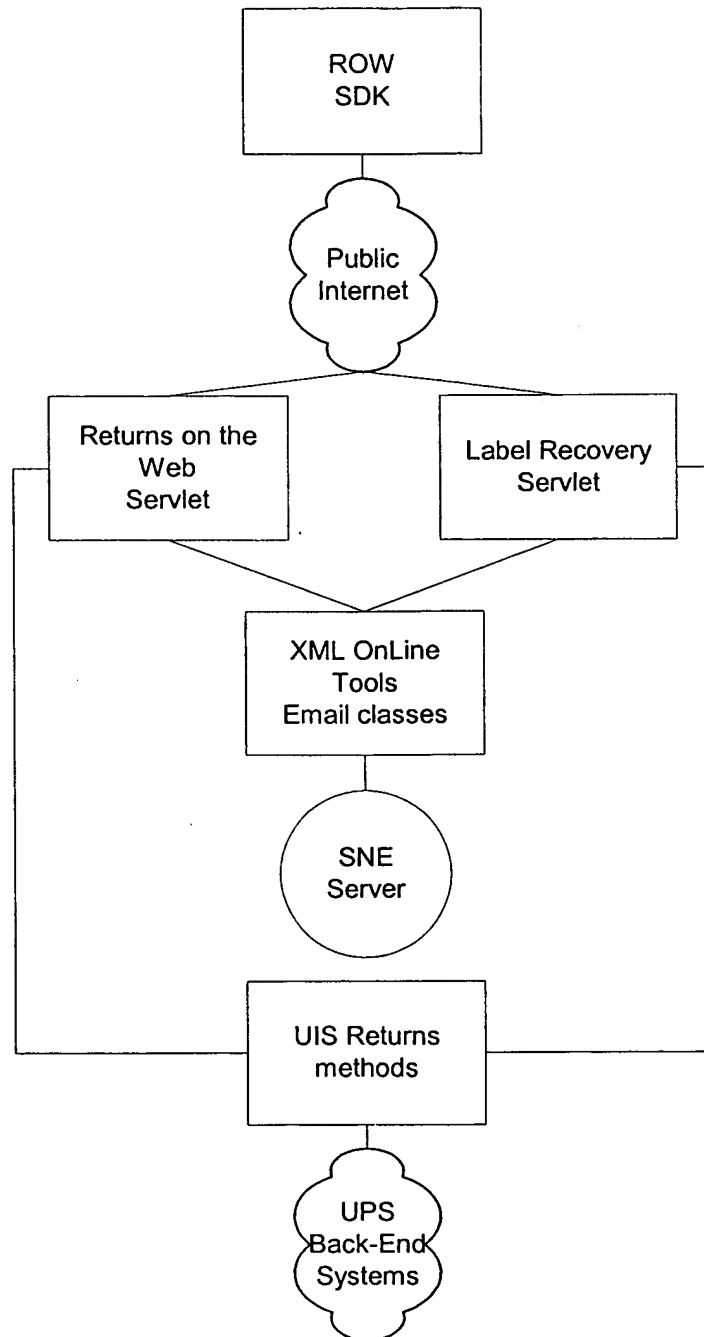
Figure 9: ROW Component Relationships

3.1 Servlet, ReturnRequest

The primary functionality of ROW XML OnLine Tool is rendered through UIS. There are many common between the Shipping and ROW servlets.

The Shipping and ROW XML OnLine Tools will use the same DTDs.

With the exception of the emails, all of the services will be requested through UIS.

The RMA number will be specifically identified in the request and assigned to the first reference number.

3.2 Servlet, Label Recovery

The Label Recovery servlet must serve two functions: 1) handle the XML Tool Label Recovery Request/Response and 2) deliver the label to a web browser on demand.

XML Tool LabelRecovery Request/Response

Should the Merchant wish to retrieve the label (usually due to delivery failure or customer loss), the Label Recovery XML Tool will allow the Merchant to request a previously generated returns label by tracking number or reference number. All requests are subject to the following limitations:

1. Label must be have been generated in the last 30 days
2. No physical scan in the tracking response
3. Returns labels only
4. Request must have singular result. (A reference number track can potentially yield multiple results if the Merchant cycles their RA numbers more frequently than UPS purges its databases.)

The process is as follows:
1. Obtain tracking data to get PLD ID and check for a physical scan
2. Call on PLD Replay to recover PLD detail
3. Call on UIS to generate label

Label Delivery

If the Merchant chooses email label delivery, the email will contain a link to the Label Recovery servlet. The link will also include an encrypted reference that will allow the servlet to recover the label and display it properly sized in the browser window. This approach will bypass numerous problems encountered when the label is included as an attachment in the email.

When invoked by the link in the email, the Label Recovery servlet will adopt the behavior of an HTML servlet.

A Label Delivery request will vet in the same way as a Label Recovery request.

The single required parameter would be appended to the URL. It will consist of the following items concatenated into a string (in this order):
    7 characters of year and Julian date the label was generated (yyyyjjj)
    The tracking number of the label
    Locality (country code/language pair)
    The IMS registration ID of the Merchant

This string will be triple DES encrypted and URL encoded. The date and DES encryption will increase the randomness of the parameter string to make ROW less vulnerable to an iteration attack. The Label Recovery servlet will decode and decrypt the string, extract the 1Z, and recover the label using the process described. Static HTML will be used to display the properly sized label in the browser so that it can be directly printed. No interaction with the web server will be supported.

If the label is unavailable or the request is invalid, static HTML with the error message will be displayed. The locality information will be used to present the error message in the appropriate language.

This will require design of an HTML page for this purpose.

3.3 ROW SDK

In order to satisfy the requirement for the request process to be *"very streamlined"*, a customer-side SDK will be provided. Decoupling UPS from the customer will be maintained by ensuring that the ROW XML documents are always backward compatible. The SDK will be deployed on the ec website only.

Java classes will be provided that present to the customer the same design pattern as is found in the AV SDK. Internally the classes will implement the controller/adapter pattern. Classes implementing congruent interfaces in ASP capable VB are anticipated in future releases.

The SDK objects will have getters and setters that the client developer can use to set up their request. Some limited range checks will be performed. To head off deployment issues, no business rules will be implemented in the SDK. The SDK Request object will construct the XML request, submit it to UPS via HTTPS and return a Response object. The Request object will handle all SSL and Base64 issues. Status, including error codes and description, and the label (as a .gif) will be in the Response object.

The ROW SDK will not contain source code or be capable of handling all possible networking issues although some proxy issues will be handled.

3.4 XOLT Email

Email is becoming more important to the web applications and the XML OnLine Tools. In addition to mail transmission, XOLT Email will provide delivery that is more robust than standard Internet email and provide a basis for future improvements in email services. This program will be designed to handle an arbitrary message from inside the DMZ (and only the DMZ). It will not provide address book services, transaction-type functions (e.g. ACIDity), encryption, or non-repudiation. It will use Sun's JavaMail 1.2, which is compatible with JDK 1.1.6, JDK 1.1.8 and JAF 1.0.1. For the first release, XOLT Email will report a send failure to a designated email address.

There are two pieces in XOLT Email: 1) a .jar implementing I_1 and handling connection to one or more SNE servers via sockets. The JUT (also used in AV) and CM will be employed to manage the socket connection. 2) A program on the SNE servers to send email and react to failed deliveries.

The XOLT email classes will offer the standard I_1 interface on the UIS App servers and connect via sockets to the XOLT email program on the SNE server to provide mail origination services from inside the DMZ to destinations on the Internet.

The program in the SNE servers will serve two purposes: a) send email to external destinations at the request of servlets in the DMZ; b) receive and react to notifications of failed deliveries. A log of all activity will be kept for diagnostic, customer service, and administrative purposes. It will check the origin of the socket connection to ensure that it is inside the DMZ.

To handle 'bounced' email (i.e. failed deliveries), the XOLT email application will receive email and examine the headers and contents to determine the appropriate action. Bounced email will be logged and forwarded to the Merchant. The application will take care to avoid "loops" when handling "bounce notification" delivery failures by logging the failure and not sending further emails. Subsequent releases may deploy more sophisticated recovery techniques. The application will also be alert for denial of service attacks and spoofed inbound email.

At the sender's request, transmission of the message may be delayed a number of minutes (max 30) to handle a race condition with PLD upload. This will be accomplished by temporarily storing the email on disk.

Please notice that the diagram below specifies SMTP rather than sendmail. Sendmail merely connects via SMTP to the appropriate UPS mail server. Since JavaMail does the same, sendmail is viewed as unnecessary overhead. It is recognized by the writer that this may be an opinion uninformed opinion and may be subject to further discussion. A POP3 or IMAPI connection to the UPS mail server would similarly be more efficient than polling a disk file and somewhat more robust under significant load or attack.
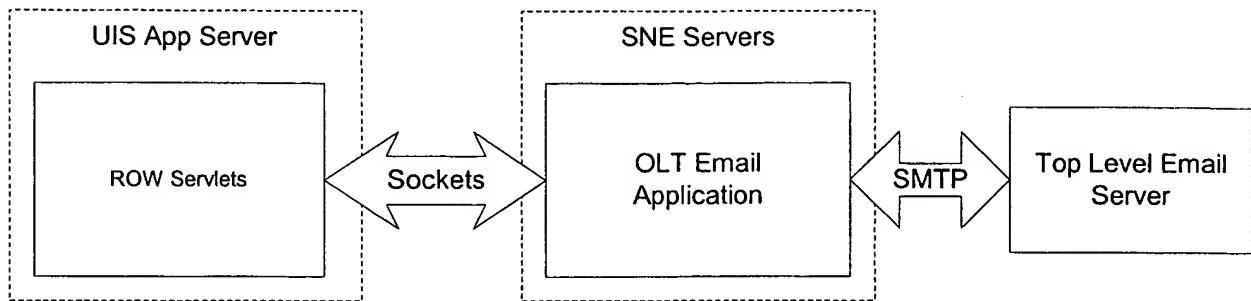
Figure 10: XOLT Email Infrastructure

App Servers to SNE Servers Communication

The OLT Email component will communicate with the OLT application using TCP/IP Sockets. We would like to reserve a range of sockets, 7750 – 7780. The firewall must be configured for access to the SNE server.

Logging

The XOLT Email Application will create logs on the SNE servers that need to be included in the log sweep process. For outbound email, the email component will log subject, send date, to email address, from email address (merchant's), undeliverable email address. For "bounced email" the above information plus the first message body of the bounced mail (which contains the information why the send failed).

We estimate that each outbound email will add 700 bytes to the log file; each bounced email message will add 1,500; and each unknown inbound message, 1,200. Please see Figure .

3.5 Email/OPLD Race Condition

There are two applications involved in order for a consumer to receive a Return Label, the Return Shipment application and the Label Recovery application. The processes are as follows:

Return Shipment

1. The consumer submits a request to the merchant for a return label.
2. The merchant then submits the request to UPS for a label.
3. Behind the scenes UPS submits the Package Level Detail to the file system. Within the file system the label can be stored on one of six servers.
4. The Package Level Detail is also submitted to OPLD for processing, may or may not be processed in real time.
5. UPS Returns a XML to the merchant
6. UPS sends the email to the consumer with a link to recover the label.
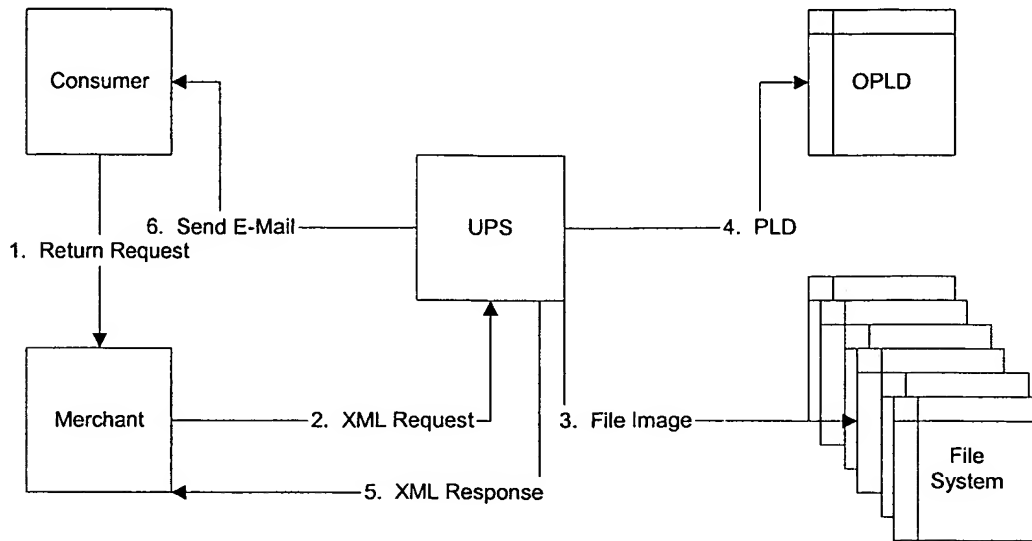
Label Recovery
1. Consumer clicks on the URL in the e-mail
2. UPS gets the image from the file systems
3. UPS returns the image to the browser
4. Consumer receives the image
OR
1. Consumer clicks on the URL in the e-mail
2. UPS gets the image from OPLD
3. UPS returns the image to the browser
4. Consumer receives the image
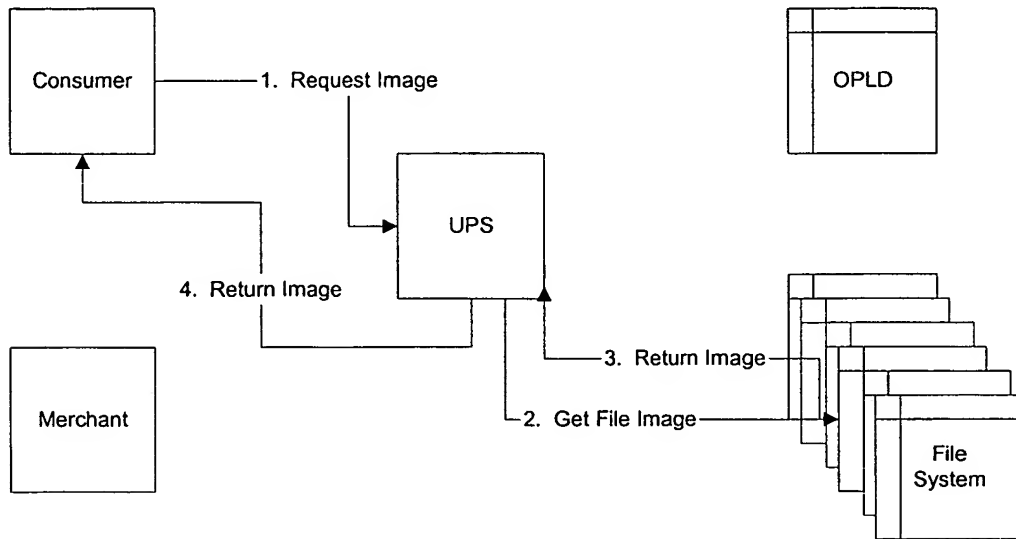
OR
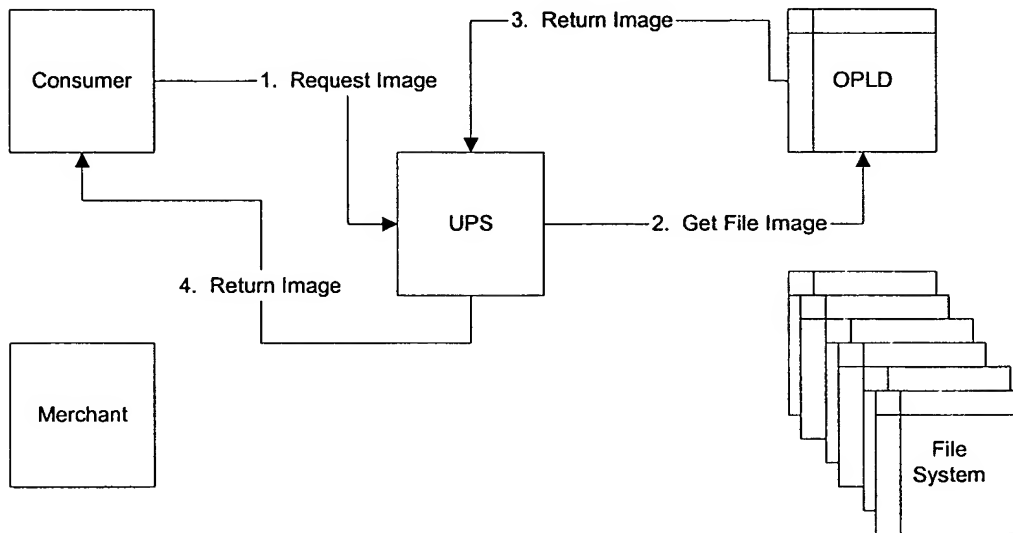
DRAFT

Analysis

There are two problems with the above scenario:

1. The file systems are used as a holding area for the files that are going to be processed to OPLD. The file systems are removed every twenty-four hours. The Label Recovery application first calls to the files system to look for the image. Because Return Shipment can place the image on any one of four servers, Label Recovery application has a one in four chance of hitting the correct server.

2. The Return Shipment application sends the Package Level Detail to OPLD for uploading and sends and e-mail to the consumer with a URL link. The processing time for OPLD varies from time-to-time.

The consumer may click on the URL as soon as they receive the e-mail and can view the label image. Other times, however, the period of time the user receives the e-mail and the period of time the user may be able to view the label may vary from 45 seconds to 7 minutes, and possibly 20 minutes during peak season.

Solution

At the sender's request, transmission of the e-mail message may be delayed a number of minutes (a maximum of 5 minutes during off time and 20 minutes during peak time) to handle a race condition with PLD upload. This will be accomplished by temporarily storing the email on disk.

4 Error Reporting and Monitoring

In general, the new servlets will make use of the existing infrastructure.

4.1 Monitoring

XML OnLine Tools status monitoring will be augmented to monitor ROW, Label Recovery, and the XML OnLine Tools Email program. XML OnLine Tools monitoring is an extension of the UIS monitoring architecture and updates the same Oracle database used by UIS. This database is, in turn, monitored by production control via a web browser. Additionally, emails are sent to a distribution list when a problem is detected. To see monitoring page on one of our development servers try http://xmldev2.ismd.ups.com/servlet/OLTMonitor

4.2 Logging

The ROW servlets will use the UIS logging classes to log to the servlet logs in the same fashion as the other XML OnLine Tools. Activity and errors will be logged to a flat file. The XOLT Email component will also log to a log file in the SNE server(s).

Each outbound email is estimated to add 700 bytes to the log; each bounced email, 1,500; and each unknown inbound email 1,200. Please see chart on page **Error! Bookmark not defined.**.

5 Resource Estimates

There are two resource demand points: The ROW requests themselves and the Emails that flow from them. Both of these charts are based on marketing data which assume 33% of requests will be for 1A/3A and 66% will be for PRL.

5.1 ROW Estimate
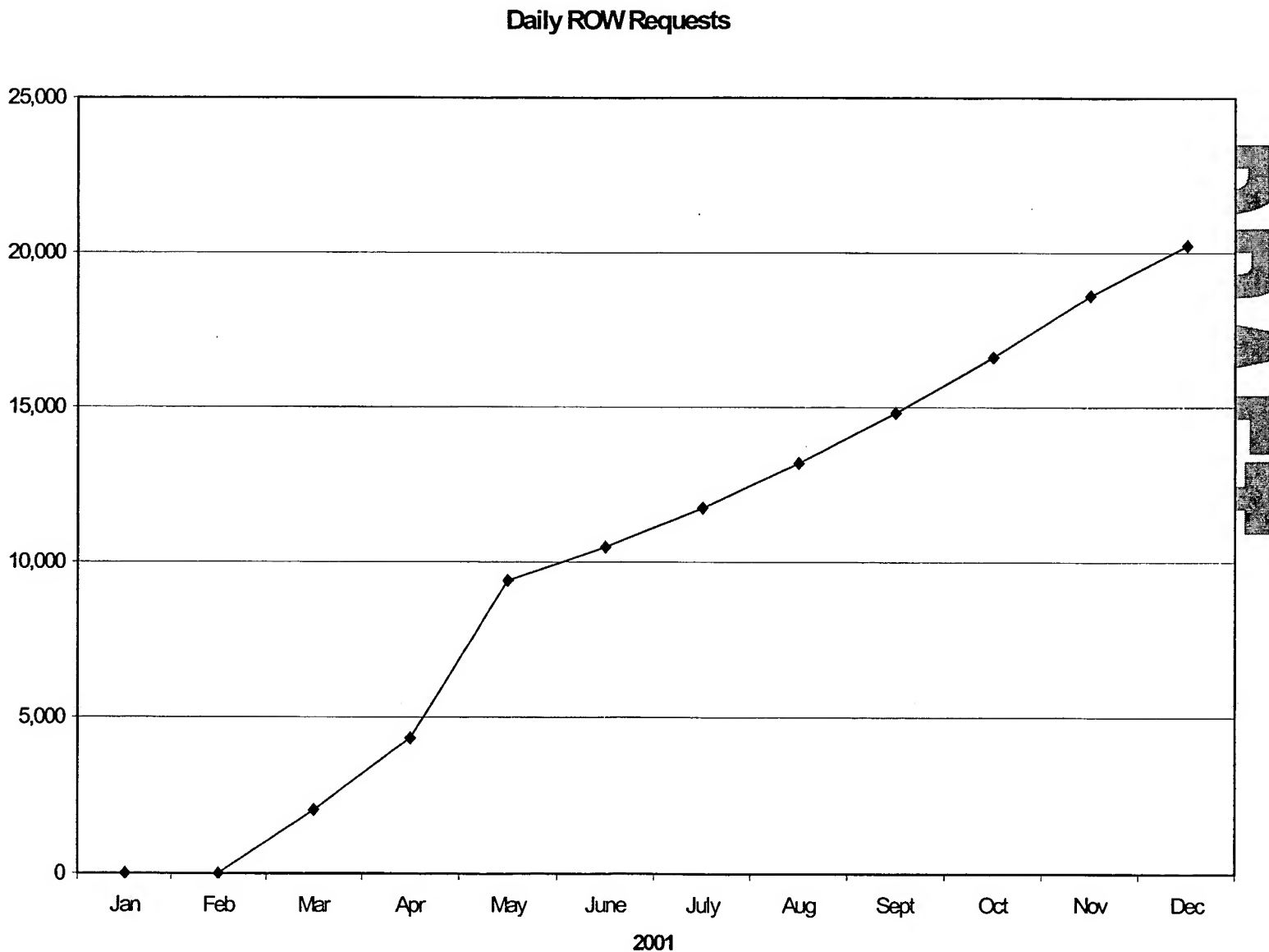
Daily ROW Requests

Figure 11: Daily ROW Requests

5.1.1 ROW Bandwidth Requirements

This is based on the above assumptions.

Daily ROW Bandwidth (XML + Email)
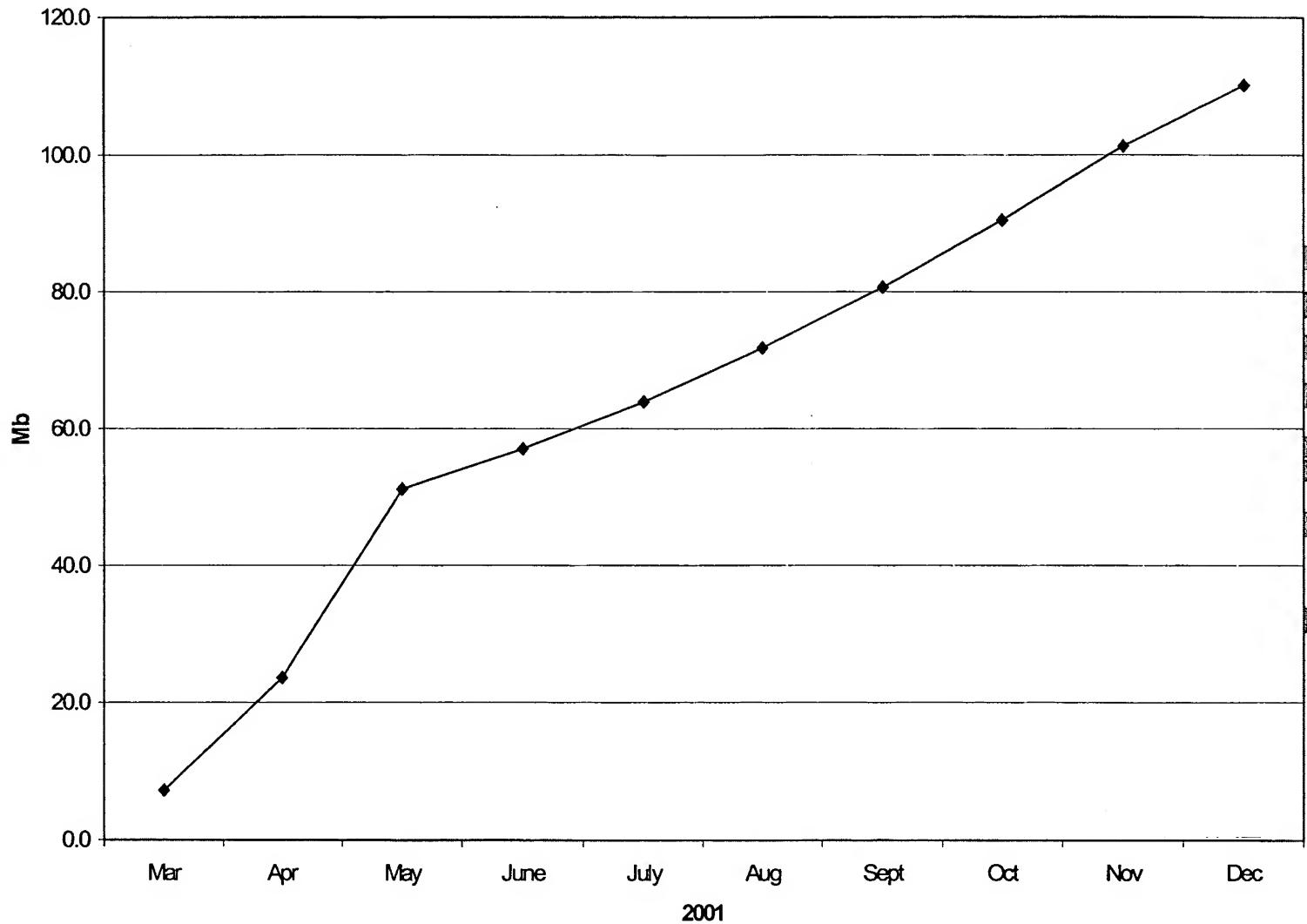
Figure 12: Daily ROW Bandwidth

5.2 Email Volume Estimate

Email volume is based on the following assumptions:

For PRL
>   95% of requests will be transmit the label via email
>   75% of requests will also request a single Return Notification Email
>   25% of requests will also request 2 Return Notification Emails

For 1A/3A
>   65% of requests will include a Pickup Notification emailed to the Consumer
>   75% of requests will also want a single Return Notification Email
>   25% of requests will also want 2 Return Notification Emails.

Daily ROW Email Volume
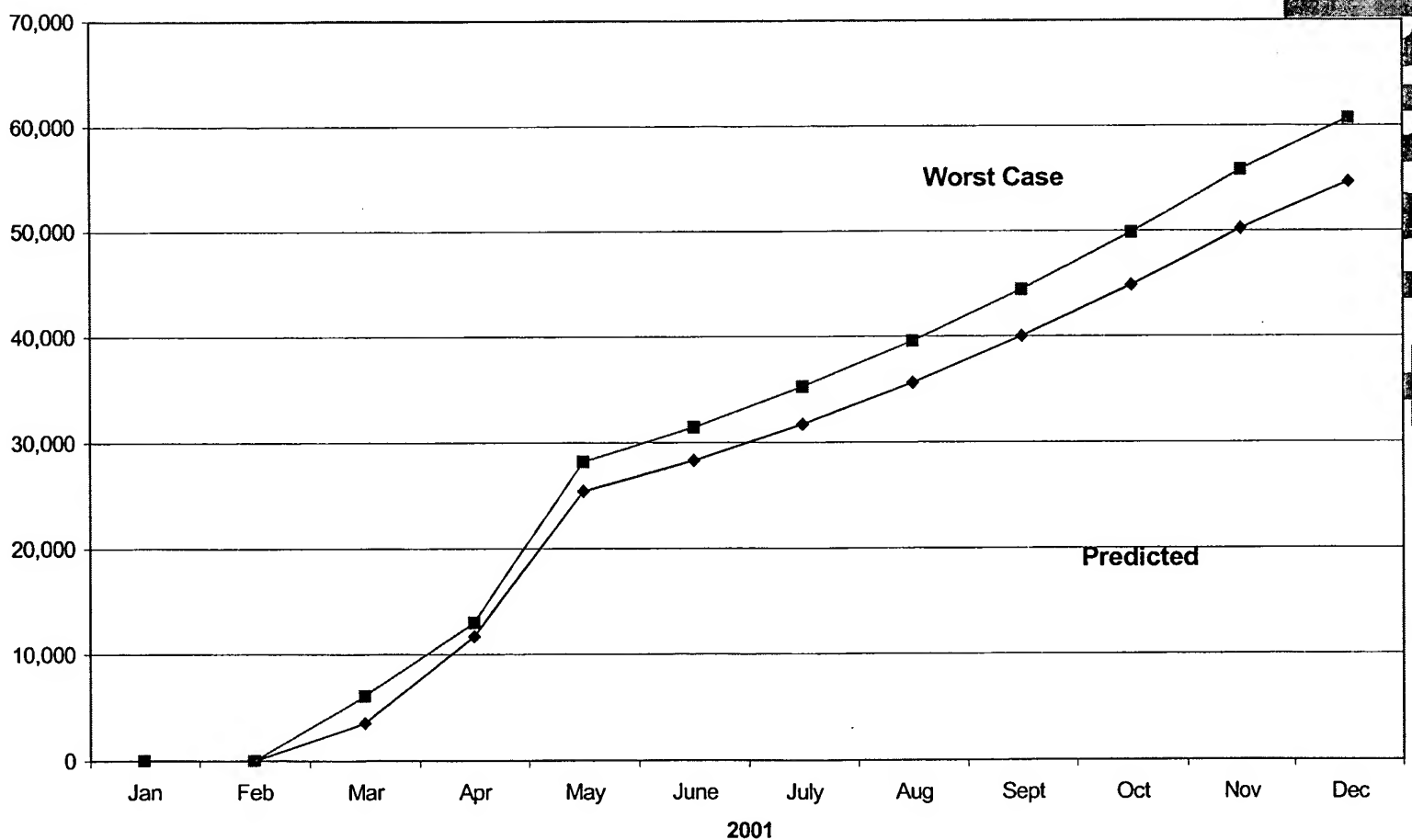
Figure 13: Daily ROW Email Volume Projection

5.2.1 Email size

Based on the above assumptions, the average email size will be 2K.
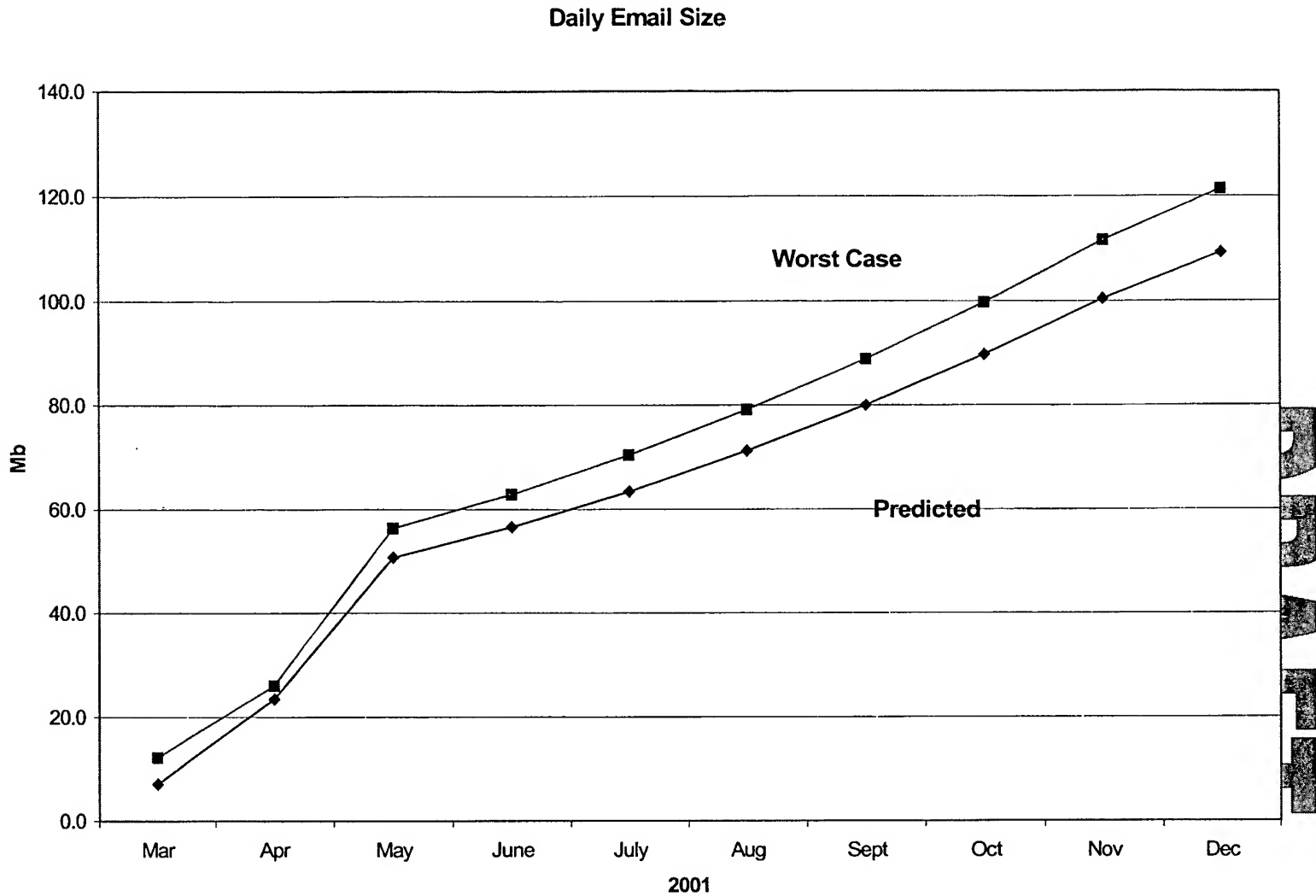
Daily Email Size

Figure 14: Daily Email Size

Daily Email Log Size
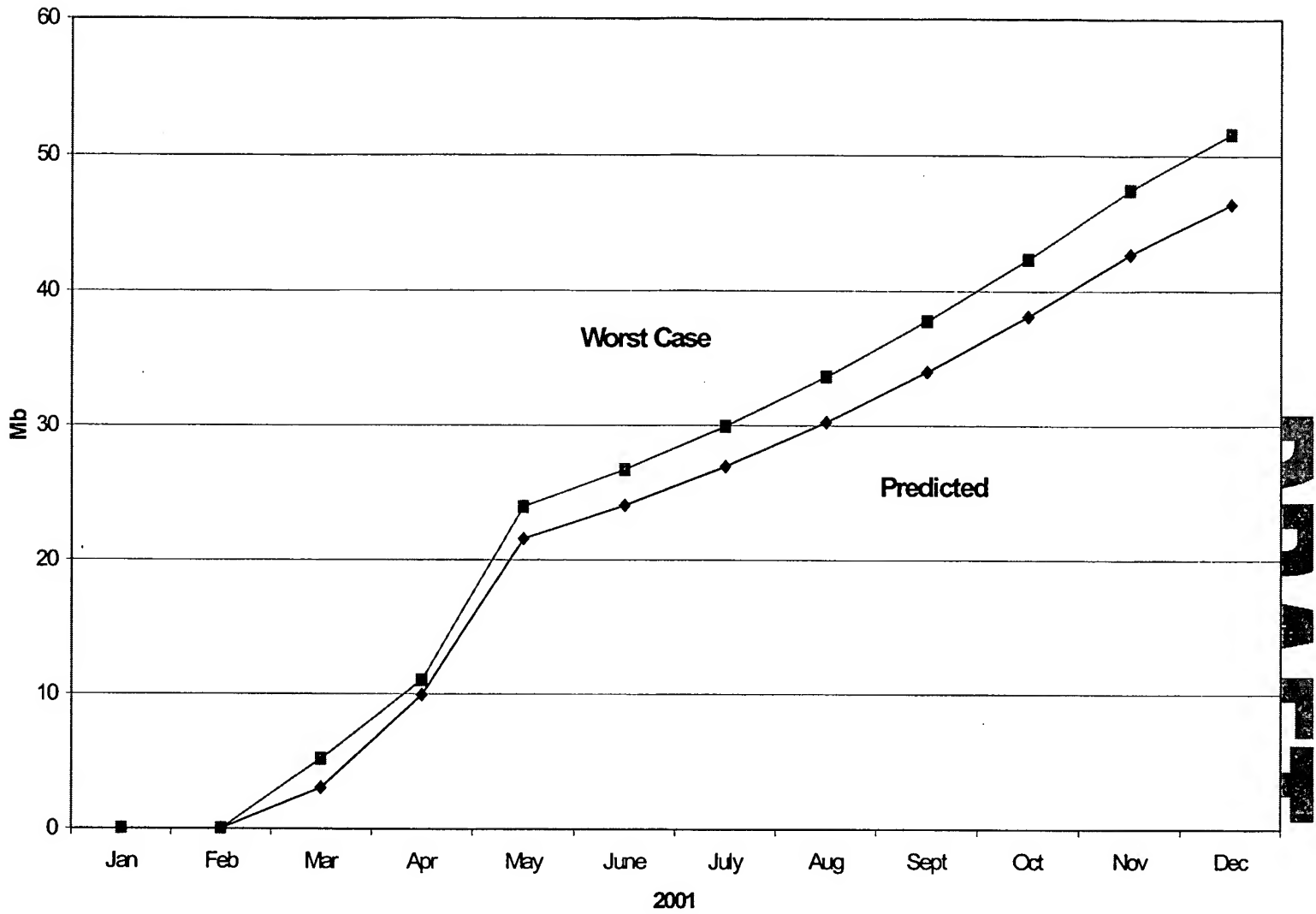
Figure 15: Daily Email Log Size

5.3 ROW Load Distribution

The ROW Load will vary over the course of a day or a week. These projections are based on the experience of the pilot with a single user, Buy.com. The utility of a single data point is limited and only slightly better than nothing at all.

Projected Weelky Volume Distribution

Figure 16: Projected Weekly Volume Distribution

Predicted Daily Volume Distribution
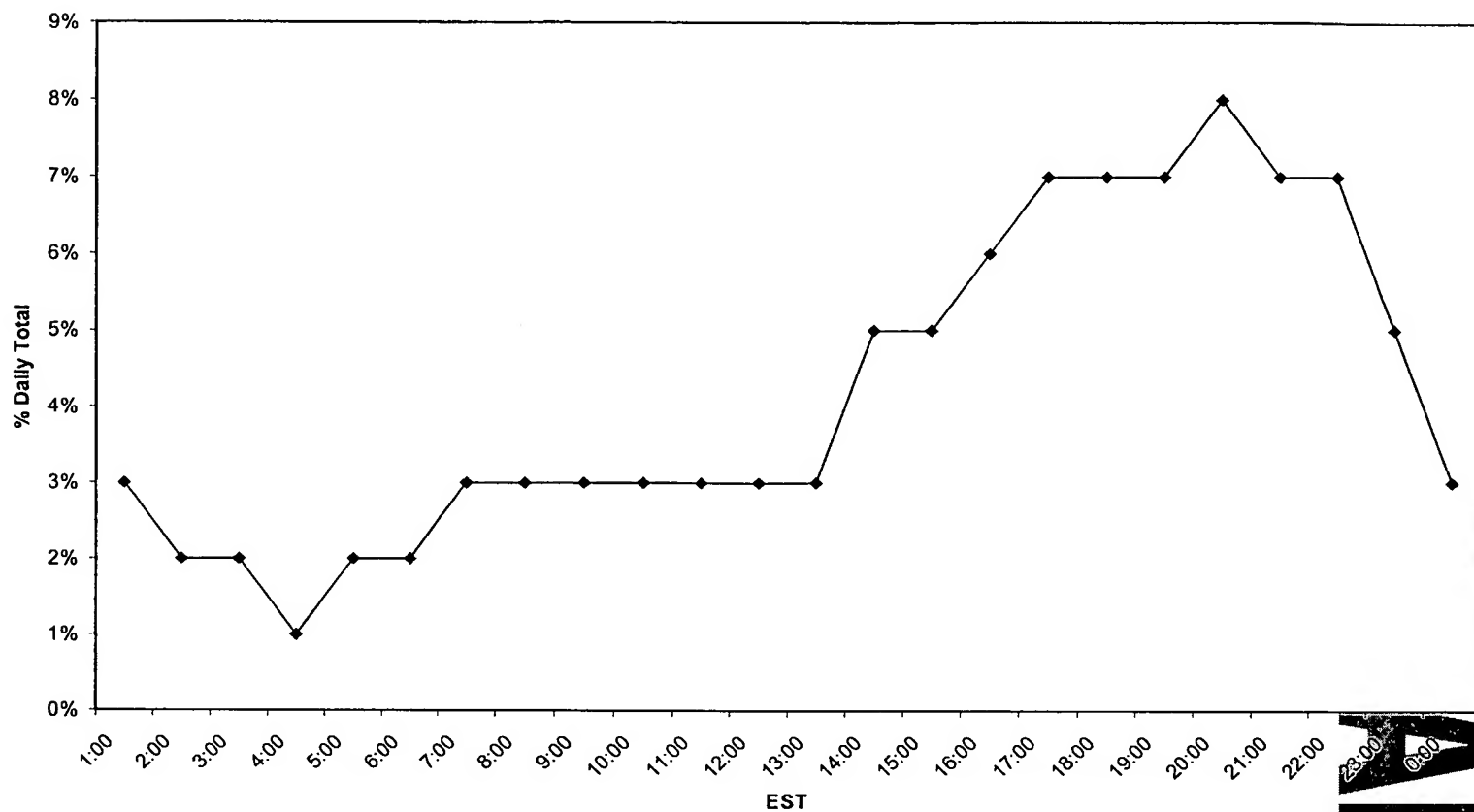
Figure 17: Predicted Daily Volume Distribution

Projected Daily Bandwidth (XML + Email)
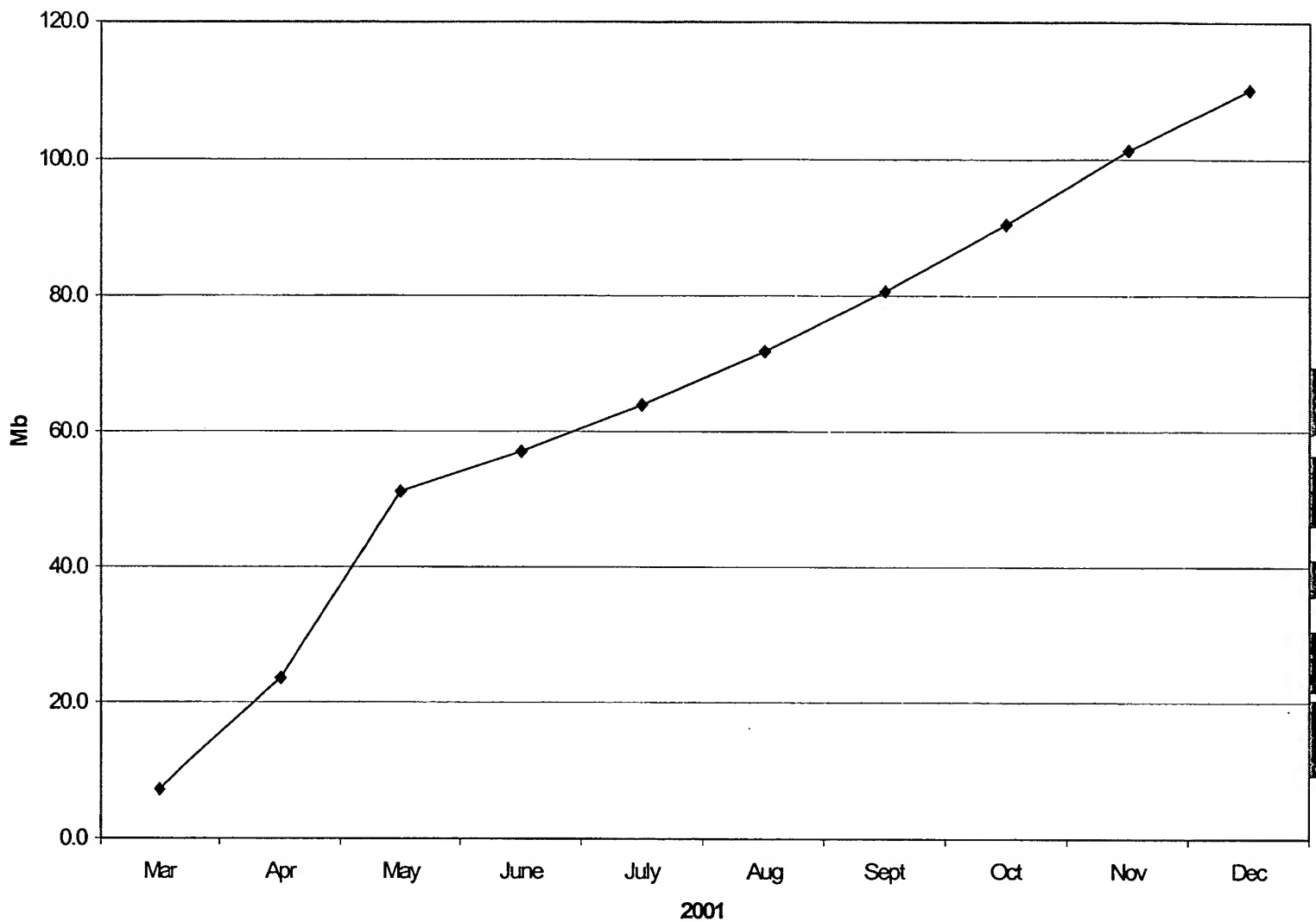
Figure 18: Daily Bandwidth Projection

6 Dependencies

6.1 UPS Systems

ROW relies on a number of UPS components that currently lack key functionality and must be upgraded in time for this project to make it's schedule.

UIS – UPS Internet Services components will provide the base functionality for generating a label
FOSS – Support for return labels
Billing – Support for additional services specified in the requirements by mid March 2001
Email – UPS SMTP/POP email servers
Drop Off Locator – Email text will include a URL to the Drop Off Locator with the origin zip code
IMS – Licensing and Access will make use of IMS to determine eligibility of the request.

6.2 Others

Several other libraries and tools that are unique to this project will be employed:

JavaMail – The email components will use version 1.2 of the Sun reference implementation of JavaMail with its SMTP class to communicate with the UPS mail servers.

JavaBeans Activation Framework (JAF) – The JavaBeans Activation Framework (JAF) was developed and tested against Sun's JDK 1.1.6 on the Solaris SPARC platform, and Windows 32 (both Windows 95, and Windows NT 4.0). This version of the JAF is written in Java (with no native code). It will run on any JDK(tm) 1.1 compatible virtual machine.

6.3 Licensing

Standard infrastructure software is used with the following exceptions:

JavaMail

The following is from the JavaMail FAQ (http://www.javasoft.com/products/javamail/FAQ.html):

Q: Is the JavaMail API implementation completely free? Can I ship it along with my product?
A: Yes. The current release of the JavaMail API implementation, is completely free and you can include it in your product. This release includes IMAP, POP3, and SMTP providers as well. Please do read the LICENSE and ensure that you understand it. The JavaBeans Activation Framework is also free for use under a similar license.

JavaBeans Activation Framework (http://java.sun.com/products/javabeans/glasgow/jaf.html)
No licensing information is available at this time

7 Appendices

7.1 Configuration

JDK version 1.1.6 (R4) and 1.1.8
XML4J version 2.0.15
Solaris 2.6 and 2.8
JavaMail 1.2
JavaBeans Activation Framework (JAF) 1. 0.1
Sendmail version 8.9.1
Microsoft Exchange Server version 5.5

7.2 Supporting Documents

Return Services Marketing Plan, Executive Summary 12/21/2000 ("For Discussion Purposes")
CIM Business Requirements: Returns on the Web 9/22/2000
Evaluation for Returns on the Web XML OnLine Tools Version 1.12 10/19/2000
XML OnLine Tools Returns on the Web Functional Requirements by Category Version 1.5 1/5/2000
Guiding Principles of UPS XML Document Design Version 1.1.6 10/16/2000
XML OnLine Tools I₁ Interface Specification Version 1.0.2 12/15/2000

7.3 Open Issues

1. **JavaMail v. UPS Servlet runners.** The following text is found in the JavaMail notes (http://www.javasoft.com/products/javamail/NOTES.txt):

   We've received reports of problems using the JavaMail API in servlets driven by Netscape web servers. The error is that the Netscape servlet implementation doesn't support the java.awt.datatransfer.Transferable class which is used by the JAF. We recommend that you submit a bug report with Netscape.

2. **Logging in the SNE Server.** The contents and size demands of the logs in the SNE server have yet to be defined.

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UPS Returns on the Web
Deployment and Implementation Procedures

DRAFT

September 27, 2000
Version 000927.01

United Parcel Service, Inc.
Enterprise Solutions
Electronic Commerce Marketing Group
Deployment Team
55 Glenlake Pkwy
Atlanta, GA 30328

www.ups.com
www.ec.ups.com

EXHIBIT B

TABLE OF CONTENTS

Chapter 1 - Introduction

1.1 Introduction

<u>These UPS Returns on the Web Deployment and Implementation Procedures (the "Procedures")
are intended to serve as guidance with respect to your deployment and implementation of the
UPS Returns on the Web service described herein and are not intended to, and do not, create any
representations or warranties with respect to the UPS Returns on the Web service. UPS may
revise and update these Procedures at any time. Please consult with UPS to ensure that you are
using the most current version of the Procedures.</u>

UPS Returns on the Web service has been developed to help facilitate the reverse logistics
process for on-line merchants. Return rates for merchandise purchased on the web run higher
than return rates of traditional retail channels. While the prevailing wisdom dictates that those
merchants with physical locations have an edge over web merchants, in fact, over 94% of returns
are *shipped* back to the merchant. Most consumers who have made purchases on the web
indicate that they would prefer to return merchandise the same way they purchased it – on-line!
Lastly, 89% of on-line shoppers indicated that a merchant's return policy influences their on-line
buying decisions. (Source: www.bizrate.com, 08/00)

Many distribution centers do not have an effective means for processing returns. Distribution
centers have no way of predicting the arrival of return merchandise. Merchants have no effective
way of linking customer returns with the customer's account information, and merchants are
often unable to identify unauthorized returns in their warehouse. Useful inventory often sits idly
in corners of the warehouse.

UPS Returns on the Web offers a solution for many of these issues. Using UPS ARS
(Authorized Return Service) and On-line Call Tag Service, merchants are better able to control
and identify returns. **UPS Returns on the Web** reduces the amount of customer service
resources required to deal with returns, by offering the merchant's customer a self-service, web-
enabled returns mechanism.

UPS Returns on the Web enables merchants to track their inbound returns and to link returns to
the UPS 1Z tracking number. **UPS Returns on the Web** provides the critical information links
the merchant requires to reconcile customer accounts and to quickly identify potential problems
with products.

UPS Returns on the Web allows the merchant's end customer to print a UPS ARS return label
from their own computer 24 hours a day, 7 days a week. The merchant will enjoy a streamlined,
more cost effective, efficient, and better managed process.

The accompanying document will provide a merchant's technical support staff with the
information needed to use the **UPS Returns on the Web** service.

UPS Returns on the Web has been created to provide merchants with an alternative to the traditional method of managing the reverse logistics process. This service is not a general service offering at this time. It is provided to merchants as a contract service, which promotes a convenient, cost saving, and controlled approach for retrieving merchandise from customers.

~~The service begins UPS and the UPS account holding customer (merchant) execute t~~The UPS Returns on the Web Contract Carrier Pilot Agreement (the "Agreement"), to be entered into by and between UPS and the UPS account-holding customer (the "merchant"),~~The agreement~~ sets forth the terms and conditions governing the service, including service start date and the rates and fees applicable thereto. ~~contains the amount UPS will charge for each shipment. These charges include a transportation charge and transaction fee.~~

The service enables ~~M~~merchants to provide participating consumers (the "ecustomers") with the "ARS Label" and "Electronic Call Tag Pickup" online return shipping ~~one or more~~ options ~~for supplying the return order information.~~ The "ARS label" return option enables merchants to send UPS return labels to customers via email for placement of return packages into the UPS shipping system. Merchants electronically submit a customer's package return information, which generates a UPS label that is sent to the merchant in the form of a digitized image. The merchant is then responsible for forwarding the UPS label to the customer for placement of the customer's package into the UPS shipping system. The "Electronic Call Tag Pickup" option will transmit a return package pickup request to UPS, which generates a Call Tag that will initiate the dispatch of a UPS driver to pick up the customer's return package from the location to which the package was originally shipped to such customer. ~~-~~Two examples of the options for customer contact are through existing or future customer service phone centers and/or the merchant's website. ~~It may be necessary for a customer or the merchant to initiate the process for returning a shipment.~~ The merchant gathers customer and product information, and assigns the necessary return merchandise authorization number (RMA#). A UPS compliant shipping label is then issued to merchant for distribution to the customer. The customer will package, label, and ~~submits~~ parcels to UPS. **[CONFIRM]**

~~This service may be used along with other UPS return services that are in place, including Authorized Return Service (ARS) and Call Tag service.~~ **UPS Returns on the Web** does not support Hundredweight service.~~.~~ Service is limited to domestic origins and destinations within the 48 contiguous United States.

1.2 Scope

The implementation is completed by the merchant with the assistance of the UPS Returns on the Web deployment team. UPS will assign a deployment representative who will work with a project manager designated by the merchant throughout the implementation. The merchant's responsibility will be to identify the key elements and performance requirements of the return service. The merchant will supply resources related to IT integration and programming during installation and implementation. **[DO WE SUPPLY A DEPLOYMENT TEAM IN EACH INSTANCE AND ARE THESE DEPLOYMENT SERVICES FREE OF CHARGE?]**

The following questions set forth in Chapter 2 willare designed to help the merchant craft the business rulesprocedures for a web return product that will meet their Customer Service Policy ("CSP") and result in a positive return experience for the merchant and theits customers. These questions, however, are not designed to be all-inclusive. Rather, they are presented to assist merchants with return issues and to address the needs of the merchant and the customer.

1.3 Deployment Representative Responsibilities

A UPS representative will be assigned by UPS available to provide advice during the deployment and implementation of the **UPS Returns on the Web** service. The UPS deployment representative will act as an intermediary between the merchant and UPS and will facilitate assist the merchant during the implementation process and in developing appropriate return procedures consistent with the serviceanswering the business rules analysis questions, and anticipate the needs of the merchant during the implementation process of the **UPS Returns on the Web** project.

1.4 Project Timeline

The projected time to complete the entire **UPS Returns on the Web** installation is estimated to be approximately 30 days, unless otherwise indicated in the Agreement. Individual customer merchant circumstances can affect the length of time needed to complete the deployment and implementation process. The following estimate is established set forth as a guideline only. AMerchants should establish a project timeline prior to deployment that is established by the merchant should-identifiesy the key target dates for implementation, and be used by the merchant prior to deployment to insure the proper scheduling of resources.

Days	1 – 3	Evaluate Customer Service Policy (CSP) and establish business rules
Days	4 – 7	Establish the performance criteria and the testing schedule
Days	8 – 30	Complete implementation
Days	15 – 30	Post-implementation follow-up

Chapter 2 - Establishing Business Rules

It is recommended that the merchant involve affected departments, functions and vendors in the design of the return process. The new process of **UPS Returns on the Web** may affect established ~~customer service policies~~ (CSP~~s~~) and vendor relationships. Operational costs and internal processes such as receiving, restocking, and inventory management may be affected. Financial considerations ~~that involve~~concerning the value of products, the crediting of accounts, or the sending of refunds to customers ~~should~~may necessitate the involvement of other functions or departments. In addition, the merchant's CRM strategy ~~can~~may be enhanced. The marketing department may want to take advantage of the improved capability resulting from this implementation.

2.1 Customer Service Policy

The merchant's customer service policy should be used as a guide for deployment and implementation of **UPS Returns on the Web** service. Prior to deployment, the UPS deployment representative and the merchant principals should discuss established return policies and procedures to determine if changes, improvements and/or additions need to be made to the CSP as a result of this product implementation. [SAME QUESTION RE: CONSULTING FEES]

2.2 Business Rules – Customer Service

For the reverse logistics channel, the merchant should frequently refer to the CSP in order to determine functional and technical requirements. The CSP will also serve as the impetus for operational changes and process improvements. The merchant's return service should offer a variety of service combinations to improve customer service.

The following questions ~~will serve~~are designed to assist the merchant in meeting customer service expectations~~,~~ and to ~~will help~~address some of the concerns associated with reverse logistics:

- How will **UPS Returns on the Web** affect your current return policy?

- How many days from ship (or receipt) date can a customer return a product?
  - When does the return clock start?
  - How will this information be communicated to the customer?

- Do you have any product(s) that can be returned unconditionally?
  - You would need to outline your product identification requirements by:

    Name, type, SKU number, manufacturer, and established database

> How will this information be made available to the web site and customer service personnel?

- What levels of transportation service should be made available for returns?
  - Ground, expedited, express, Call Tag, ARS
  - Products – letters and packages
  - When should different services be used?
  - How does weight, dimensions, and other package characteristics affect transportation service decisions?

- Do you want to identify specific products to be returned directly to vendors, suppliers and manufacturers?
  - Establish business rules to identify specific vendors.
  - Will you require notification to/from the vendor?

- How are ~~warrantee~~ products under warranty handled?
  - ~~Does~~ Are customers entitled to return guaranteed or warranted merchandise ~~warrant a return~~?
  - Does credit go to the merchant or customer for guarantees or warranties?
  - What ~~will be your~~ notification requirements will be in place? Pre-alert or Post?

- Under what situations would you charge for shipping a return?

- What criteria would be used to calculate these charges?

- Are replacements for exchanges, wrong items, color, etc. shipped automatically?

- Do you have a need to identify high repeat return customers?
  - Data mining
  - Trend reports
  - Cost controls

- How do customer service personnel currently answer …
  - Regular shipment inquiries?
  - Return shipment inquiries?

- Do you have a need for a customer to track a package from your web site?

- ➢ Invites the customer back to the website.
- ➢ Provides an opportunity for a customer to come back to you.
- ➢ UPS OnLine Tools available.

- How will you help your customers who are unable to print a label?
  - ➢ How would they be able to tell you that they cannot print?
  - ➢ Would you be able to print and mail?
  - ➢ Offer alternate email address options (such as customer's work email)?

- How will you assist your customers who have questions about credit or refund inquiry?
  - ➢ Reference numbers used.
  - ➢ Q&A page.
  - ➢ Email option.
  - ➢ Customer Service phone number.

- Will you have a need for proof that your customer gave the return shipment to UPS?
  - ➢ Call tag vs. ARS.
  - ➢ Pickup or drop-off locations.
  - ➢ Tracking number usage.
  - ➢ Reference number usage.

- How will you handle packing needs of your customer for safe transport?
  - ➢ Container requirements.
  - ➢ Packing requirements.
  - ➢ Labeling requirements.
  - ➢ Paper.

- How do you currently issue refunds or credit?
  - ➢ Credit account or credit card.
  - ➢ Mail check.
  - ➢ Merchandise coupon.

- Are you accepting any products for repair?
  - ➢ Repair in house.

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> ➢ Repair off site.

- Can a delay in time-in-transit affect customer ~~or merchant~~ satisfaction?

  ➢ Shelf life.

  ➢ Product quality.

2.3 Business Rules – Finance and Accounting

The finance department of the merchant may be affected by the **UPS Returns on the Web** service. The following questions ~~will~~ are designed to assist the accounting and finance department in identifying needs and ~~the evaluation of the~~ evaluating current ~~process involving~~ return shipments procedures.

- Which products are customers entitled to return for a ~~warrant~~ refunds? Which products are customers entitled to return ~~or are authorized for~~ credit only?

- What is your refund policy ~~for a refund~~?

  ➢ Only when return is authorized?

  ➢ Whenever shipment is returned?

  ➢ Refund only in certain circumstances?

- In the original order, do you pass on the shipping charges to customers?

- Do your refunds include the ~~paid~~ shipping charges paid for by the customer?

- Do your refunds include any special charges paid for by the customer?

  ➢ If you do refund them, how do you handle charges?

  ➢ Do you include any taxes paid by the customer?

  ➢ Are handling charges refunded?

  ➢ Are there miscellaneous charges (added into processing)?

- Do you pass on charges to ship a replacement item if the customer wants a different size, color, etc.?

  ➢ Shipping only.

  ➢ Handling only.

  Shipping and handling.

- Do you pass on shipping charges to reship if an order was filled inaccurately?

  - ➢ How would you identify this mistake?

  - ➢ How would your customer tell you it was a mistake?

- How could a customer request a refund or credit?

  - ➢ Check mailed.

  - ➢ Credit account or credit card.

  - ➢ Merchandise coupon credit on future purchases.

- Do you charge your customer a restocking fee for returned items?

  - ➢ What options would a customer have to pay the fee?

  - ➢ Will you be able to handle credit card transactions for shipping charges, credits or refunds?

- Do you have any products of extremely low value?

  - ➢ Would you want them included as returns?

  - ➢ Do you have any products of recyclable value?

- How would the accounting department handle returned items coming back into inventory?

2.4 Business Rules – Transportation and Warehousing

The transportation and warehousing business rules should align with the CSP. Some of the elements of concern for customer satisfaction are related to time-in-transit standards, how to apply the credit, repair or replacement possibilities, replacement shipment time-in-transit requirements, damaged products, inventory control, inbound process, and restocking procedures.

These following questions are designed to assist the merchant in ~~would be relevant to~~ managing warehouse activity:

- What departments do you notify when a return has arrived into the warehouse?
  - ➤ Accounting, Collections, AR, AP.
  - ➤ Customer Service.
  - ➤ Sales and Marketing.
- What information will these departments require?
- What paperwork do you use to process returns?
  - ➤ Handwritten document.
  - ➤ Inbound Manifest/invoices/packing slips.
  - ➤ Advanced shipment notifications.
- What time of the day are returns processed?
  - ➤ Are there time conflicts?
  - ➤ Are there space restrictions?
  - ➤ Are their peak times during the day, week, and month?
- How many days of return inventory are left unprocessed daily?
- How do you measure your warehouse processing performance?
- How many carriers are involved in the transportation of returns to the warehouse?
  - ➤ TL/LTL carriers.
  - ➤ Other small package carriers.
- How does restocking affect the current inventory levels?
  - ➤ How should returns be accounted for in inventory?
  - ➤ Does product need to be placed back in inventory before it is shipped again?

2.5 Additional Considerations

- Are you planning to include any of your vendors in the service?

  ➢ Will a vendor be receiving return products from your customers?

  ➢ Will a vendor advertise the service?

  ➢ Will a vendor be shipping return products to you?

- If so, how will you include the vendor in the entire information process?

- Will training be needed to educate your workforce about this service?

  ➢ Sales personnel.

  ➢ Customer Service personnel.

  ➢ Accounting.

  ➢ Marketing.

  ➢ Warehousing personnel.

- How will you inform employees about the service?

  ➢ Formalized training?

  ➢ Through informal communications.

  ➢ Meetings.

- Will you update customer service call centers with new information as the service expands?

  ➢ How will this be accomplished?

  ➢ ~~What will be the frequency~~How often?

2.6 Product Selection

The merchant will need to identify the valid reasons for returning product as well as which specific SKUs will be accepted for return.

Several options will be available for merchandise return, and the merchant will choose the UPS services that best meet their business requirements. Consideration will need to be given to issues such as:

> ➢ The customer did not want or refused a shipment.
> ➢ Merchandise was damaged.
> ➢ Wrong items were shipped.
> ➢ Whether the customer wants a replacement, a credit or a refund.

Attention will need to be given to issues surrounding non-standard products such as liquids, breakables, perishables, and irregularly shaped or weighted products. Special considerations should be made for the return of partial orders. Frequently, the carton size is too large for the partial return and the packing material is insufficient to protect contents.

In addition, return for repair procedures- and value limitations should be established. Very low value items should be cost-justified before being eligible for return service. In most cases it may be less costly to scrap low value items and issue credit to these customers. The merchant's web site should reflect customer choices that coincide with the merchant's decisions regarding these issues.

2.7 Shipping and Accessorial Charges

Are there SKUs for which oversized charges need to be applied? Does the merchant have the dimension sizes? These dimension sizes will need to be sent in the XML file to correctly apply oversize charges. Does the merchant have SKUs for which additional handling charges need to be applied? The merchant needs to plan how returns charges will be applied. The merchant may need to absorb the charges in instances where merchandise was shipped in error. The merchant may want to absorb the charges if the customer is a "good customer". Obviously, "good customer" needs to be carefully defined by establishing limiting criteria.

In instances where the customer will charged, the merchant needs to decide how much to charge, and how to apply the charges (e.g., Bbill to the existing credit card number in the merchant's database, or ask for credit card information at the point-of-contact). In any event, the merchant must understand that UPS charges the merchant a shipping charge and accessorial fee for each use of the service. UPS will not collect any charges directly from the merchant's customer.

2.8 Available Transportation Service Levels

The following UPS Services are applicable for return service.

- UPS Next Day Air package 1 to 150 pounds, UPS Next Day Air Letter
- UPS 2nd Day Air package 1 to 150 pounds, UPS 2nd Day Air Letter
- UPS 3 Day Select package 1 to 150 pounds
- UPS Ground packages 1 to 150 pounds
- UPS ARS service
- UPS Call Tag Service

UPS Returns on the Web service will be available to and from addresses within the 48 contiguous United States.
Ground or 3 Day Select Service packages dropped off Saturday or Sunday will ship on Monday.

Pickup service through our UPS Call Tag service is available Monday through Friday.

UPS Air services are available through our Call Tags service.

UPS Hundredweight service is not available for **UPS Returns on the Web**.

Chapter 3 - Programming / Installation

3.1 Installation Overview

This chapter covers the **UPS Returns on the Web** technical specifications. –Information in this chapter includes the Request and Response XML document requirements as well as a description of data elements and error codes. Sample code is provided as a guideline. Merchants will need to create proprietary code to meet their individual functional and technical requirements.

3.2 How It Works

This section provides an example of how a customer could request a return via a web site.

A customer accesses the merchant's website to return item(s). The customer should have the
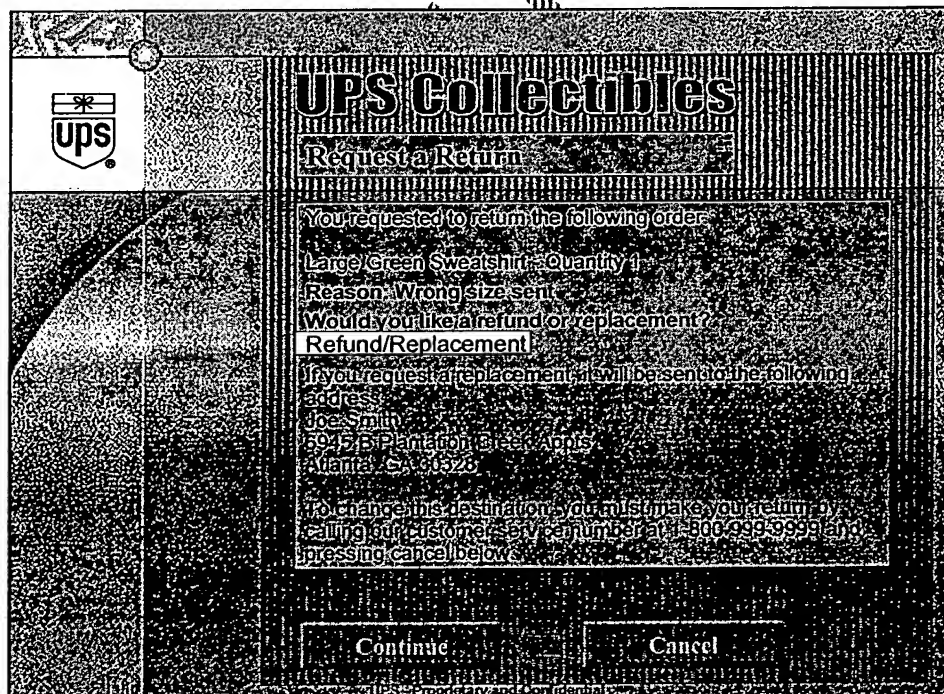
ability to reference their order history and select an order that they have already placed.

The customer is able to process a return based on the business rules the merchant has established. The customer could be directed to verify their address and information about the order. The merchant can direct a customer to a different channel (Call Center) if the verification process is not satisfied. If the customer meets the necessary criteria the following options would be made available:

1. The customer return product via UPS ARS (Authorized Return Service).

    With ARS, the following options are available:

    ➤ The customer can print the UPS ARS label directly from their PC. This is accomplished by displaying the label image on the customer's web browser or by sending the customer an email message that contains a URL link to the ARS label image.
    ➤ The merchant can receive the URL containing the label image giving the merchant the capability to print and mail a label to the customer. This option would be beneficial if the customer did not have access to a printer.
    ➤ It is possible to send emails containing the URL label image to both the customer and the merchant. This enables the customer and merchant to save the URL and print it at a later time or at a different location.

2. The customer can request a UPS Call Tag pickup. This gives the customer the option ~~to~~of ~~have a~~having a UPS Driver pick up the return from their location and send it to the merchant via UPS Next Day Air, 2nd Day Air, 3 Day Select or Ground Service.

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3.3 Browser Version

It should be noted that UPS generates the ARS label image in a PNG format. The *.PNG image **file can only be viewed and printed in** the Microsoft® Internet Explorer **web browser** ~~and~~ or Netscape Navigator **web browser Versions 4.0 and higher.** The ~~MAC~~Mac version of Netscape's web browser is not compatible with the PNG format. The merchant's web application should test for the customer's browser compatibility. There is Java script available which allows a web server to check a customer's web browser version as the customer logs on to the merchant's site. Utilizing this feature would allow the merchant's site to re-direct customers with non-compliant browsers. The merchant will need to design an alternative to processing returns for these exceptions.

3.4 General Programming Information

Communication

An e-commerce application invokes **UPS Returns on the Web** by initiating Hypertext Transfer Protocol (HTTP) communication with the server hosting **UPS Returns on the Web**. HTTP is an application-level protocol for distributed, collaborative, and hypermedia information systems. HTTP is a generic protocol used to communicate between user agents and proxies/gateways to other Internet systems, including those supported by SMTP, NNTP, FTP, Gopher, and WAIS. HTTP allows a user to readily exchange XML-formatted messages.

XML

eXtensible Markup Language (XML) is an open standard for defining markup languages to represent structured information over the web. XML documents are used for business-to-business communication and data interchange between dissimilar systems. Network transfer occurs with standard HTTP over TCP/IP.

UPS Returns on the Web uses XML documents to communicate with e-commerce applications. XML, like its cousin HTML, is a subset of Standard Generalized Markup Language (SGML). Whereas HTML is used to tag words, pictures, and other media so that they can be rendered the same way by different browsers, XML is used to tag documents and data so that different software consumers can interpret them without ambiguity.

For example, consider the following text:

1Z0597X90219590035

This string can be interpreted in many ways—an invoice number, a purchase order number, a random sequence of characters (noise). Using XML to tag the string removes the ambiguity:

<TRACKINGNUMBER>1Z0597X90219590035</TRACKINGNUMBER>

The tagging mechanism of XML guarantees that if documents are structured properly, the data can always be parsed.

UPS Returns on the Web supports XML 1.0 specification.
(http://www.w3.org/TR/1998/REC-xml-19980210/).

DTDs

A Document Type Definition (DTD) is a set of rules that specifies how to use XML markup. It contains specifications for each element, including what the element's attributes are, what values the attributes can take on, and what elements can be contained in others. Trading partners use DTDs as interface contracts (for example, input/output specifications that programmers use to craft software). DTDs are also used by software to validate the syntax of XML documents.

Integration Requirements

To integrate **UPS Returns on the Web** into an e-commerce application, proprietary programming code must be developed that adds business requirements and data to the **UPS Returns on the Web** process. Merchants can use any programming language that supports HTTP communication across the Internet and will need to know how to encode and decode XML documents.

It is recommended that an XML parser with an Application Programming Interface (API), be used to manipulate XML documents. There are several commercial XML parsers on the market. Freeware versions are also available.

Label Generation Request Method

To generate a request for a return label the merchant passes a valid XML Request document to the UPS web server. Included in the Request document is the merchant's Return URL.

An XML Response document will be returned to the merchant. The Response file will contain all relevant information regarding the return as well as a URL to the label image. The merchant can display this URL on the customer's browser for easy access. If indicated in the XML Request, UPS will also send an e-mail containing the label URL to the customer and the merchant.

The following code snippet is from a sample file called sendxml.asp, demonstrating how a merchant could send a Request document to the UPS Returns on the Web site.

Initialize the URL to the Returns on the Web site. This is the URL to post the XML Document.

```
<%
strPOSTURL = "http://www.upsreturnservices.com/sendittest.asp"
%>
<Html>
<FORM action="<%=strPOSTURL%>" method=post>
```

Put XML into textarea field so it can be posted as a variable.

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```
<textarea name=XML id=XML rows=35 cols=80>
<?xml version="1.0"?>
<!DOCTYPE SHIPMENTREQUEST SYSTEM " http://www.upsreturnservices.com/dtd/shipreqtest.dtd ">
<SHIPMENTREQUEST>
        <LOGIN>
                <LOGINID>UPSTEST</LOGINID>
                <PASSWORD>UPSTEST</PASSWORD>
        </LOGIN>
</SHIPMENTREQUEST>
</textarea>
<BR>
<input type=submit value="SEND">
```

The XML response will be posted to the RETURNURL variable specified in the XML Request document.

```
<input type=hidden value="http://207.16.70.48/client/saveorder.asp" name="RETURNURL">
```

Merchant specific data will be posted back to the RETURNURL so merchant can control any data relationships that may occur.
```
<input type=hidden name ="MERCHANTORDERNUMBER" value="PO123">

</form>
</html>
```

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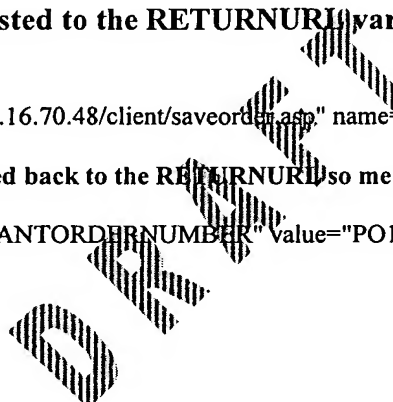
Label Link Response Method

Once the request document is processed, a response post is performed to the RETURNURL specified in the request document. The response post will contain the following information and can be processed similar to saveorder.asp:

```
<%
'traverse through all variables
dim oPostElm
For Each oPostElm In Request.Form
        Response.Write(oPostElm & " = " & Request.Form(oPostElm) & "<br>")
Next
%>
<br>
<a href=<%=Request.Form("LABELURL")%> target="newwindow">Click here to view label </a>
</html>
```

The execution of this program results in the following:

```
LABELURL = http://63.74.215.82/Progistics/XML_Processor/Server/UPSTEST/Links/12075.html
MERCHANTORDERNUMBER = PO123
RESPONSESTATUSCODE = 0
RESPONSESTATUSDESCRIPTION = Success
ERROR = 0No error
ERRORDESCRIPTION = No error, No error, No error, No Error, No error
CONSIGNEEREFERENCE = 111
TRACKINGNUMBER = 1Z1234562712451056
RETURNURL = http://207.16.70.48/client/saveorder.asp
SHIPPERREFERENCE = INV111
SHIPPER = TEX
```

Click here to view label

An error in execution of this program results in the following variables being posted back to the RETURNURL. Below are two examples:

```
RESPONSESTATUSCODE = 609
RESPONSESTATUSDESCRIPTION = Unable to process request
ERRORDESCRIPTION = Invalid Login ID. Verify Login ID with System Administrator.
RETURNURL = http://207.16.70.48/client/saveorder.asp
MERCHANTORDERNUMBER = PO123
OR
RESPONSESTATUSCODE = 2
RESPONSESTATUSDESCRIPTION = Failure
ERRORDESCRIPTION = Package #1: Required attribute SHIPPER is missing
MERCHANTSPECIFICURL = MERCHANTORDERNUMBER
RETURNURL = http://207.16.70.48/client/saveorder.asp
```

3.5 Shipment Request

Request DTD

Generation of an ARS or Call Tag starts with a SHIPMENT REQUEST. An XML SHIPMENTREQUEST must be validated against the DTD SHIPMENTREQUEST.dtd:

```
<?xml version="1.0" encoding="UTF-8"?>

<!ELEMENT SHIPMENTREQUEST (LOGIN, DEFATTRIBUTES, PACKAGES, SHIPMENTSERVICE, CLOSEOUTMODE, PACKAGEDETAIL)>

<!ELEMENT LOGIN (LOGINID, PASSWORD)>

<!ELEMENT LOGINID (#PCDATA)>

<!ELEMENT PASSWORD (#PCDATA)>

<!ELEMENT DEFATTRIBUTES (CONSIGNEE, SHIPPERINFO, TERMS, CURRENCYCODE?, SHIPDATE, SHIPMENTSERVICEOPTIONS?, SHIPNOTIFICATION?)>

<!ELEMENT CONSIGNEE (COMPANY, CONTACT, ADDRESS1, ADDRESS2?, CITY, STATEPROVINCE, POSTALCODE, PHONE?, COUNTRYSYMBOL)>

<!ELEMENT COMPANY (#PCDATA)>

<!ELEMENT CONTACT (#PCDATA)>

<!ELEMENT ADDRESS1 (#PCDATA)>

<!ELEMENT ADDRESS2 (#PCDATA)>

<!ELEMENT CITY (#PCDATA)>

<!ELEMENT STATEPROVINCE (#PCDATA)>

<!ELEMENT POSTALCODE (#PCDATA)>

<!ELEMENT PHONE (#PCDATA)>

<!ELEMENT COUNTRYSYMBOL (#PCDATA)>

<!ELEMENT SHIPPERINFO (SHIPPER)>

<!ELEMENT SHIPPER (#PCDATA)>

<!ELEMENT TERMS (#PCDATA)>

<!ELEMENT CURRENCYCODE (#PCDATA)>

<!ELEMENT SHIPDATE (#PCDATA)>
```

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```
<!ELEMENT SHIPMENTSERVICEOPTIONS (DECLAREDVALUE?)>

<!ELEMENT DECLAREDVALUE (CURRENCYCODE, MONETARYVALUE)>

<!ELEMENT MONETARYVALUE (#PCDATA)>

<!ELEMENT SHIPNOTIFICATION (EMAIL)>

<!ELEMENT EMAIL (CONSIGNEEEMAIL?, SHIPPEREMAIL?, EMAILRETURNADDRESS,
EMAILSUBJECT, EMAILMESSAGE)>

<!ELEMENT CONSIGNEEEMAIL (#PCDATA)>

<!ELEMENT SHIPPEREMAIL (#PCDATA)>

<!ELEMENT EMAILRETURNADDRESS (#PCDATA)>

<!ELEMENT EMAILSUBJECT (#PCDATA)>

<!ELEMENT EMAILMESSAGE (EMAILMESSAGETEXT+)>

<!ELEMENT EMAILMESSAGETEXT (#PCDATA)>

<!ELEMENT PACKAGES (PKG)>

<!ELEMENT PKG (PKGWEIGHT, DIMENSION, PACKAGING, REFERENCE,
PACKAGESERVICEOPTIONS, LABELFORMAT?)>

<!ELEMENT PKGWEIGHT (WEIGHTUNITS, WEIGHTVALUE)>

<!ELEMENT WEIGHTUNITS (#PCDATA)>

<!ELEMENT WEIGHTVALUE (#PCDATA)>

<!ELEMENT DIMENSION (DIMUNITS, DIMVALUE)>

<!ELEMENT DIMUNITS (#PCDATA)>

<!ELEMENT DIMVALUE (#PCDATA)>

<!ELEMENT PACKAGING (#PCDATA)>

<!ELEMENT REFERENCE (CONSIGNEEREFERENCE, SHIPPERREFERENCE)>

<!ELEMENT CONSIGNEEREFERENCE (#PCDATA)>

<!ELEMENT SHIPPERREFERENCE (#PCDATA)>

<!ELEMENT PACKAGESERVICEOPTIONS (OVERSIZE?, ADDITIONALHANDLING?, CALLTAG?,
RETURNDELIVERY)>

<!ELEMENT OVERSIZE (#PCDATA)>

<!ELEMENT ADDITIONALHANDLING (#PCDATA)>
```

<!ELEMENT CALLTAG (CALLTAGFLAG, CALLTAGDESCRIPTION)>

<!ELEMENT CALLTAGFLAG (#PCDATA)>

<!ELEMENT CALLTAGDESCRIPTION (#PCDATA)>

<!ELEMENT RETURNDELIVERY (RETURNDELIVERYFLAG, RETURNDELIVERYDESCRIPTION)>

<!ELEMENT RETURNDELIVERYFLAG (#PCDATA)>

<!ELEMENT RETURNDELIVERYDESCRIPTION (#PCDATA)>

<!ELEMENT LABELFORMAT (#PCDATA)>

<!ELEMENT SHIPMENTSERVICE (SCS)>

<!ELEMENT SCS (#PCDATA)>

<!ELEMENT CLOSEOUTMODE (#PCDATA)>

<!ELEMENT PACKAGEDETAIL (#PCDATA)>

Shipment Request Elements - Field Explanations

The following table describes each of the fields contained in a shipment request that will create either an ARS label or generate a Call Tag for package pickup. Please note which elements are required and which elements are optional.

TAG	REQUIRED? Y or N	CHARACTER LENGTH MAX	DESCRIPTION
SHIPREQUEST	Y		OPENING TAG
LOGIN	Y		REQUIRED TAG
LOGINID	Y		ID assigned by Ecommerce Enterprise group
PASSWORD	Y		Password assigned by Ecommerce Enterprise group
DEFATTRIBUTES	Y		REQUIRED TAG
CONSIGNEE	Y		OPENING TAG FOR CONSIGNEE ELEMENTS
COMPANY	Y	30	COMPANY OR CONSIGNEE NAME OF ARS USER
CONTACT	N		ARS USER CONTACT NAME
ADDRESS1	Y		STREET NAME AND NUMBER OF ARS USER
ADDRESS2	N	30	APT#, DEPT NAME OR OTHER DESCRIPTION OF ADDITIONAL ADDRESS INFORMATION
CITY	Y		CITY NAME OF ARS USER
STATEPROVINCE	Y	2	2 CHARACTER STATE ABBREVIATION i.e.; NY,GA,IL
POSTALCODE	Y	10	5 DIGIT ZIP or ZIP+4 CODE OF ARS USER
PHONE	N	15	OPTIONAL FIELD
COUNTRYSYMBOL			MUST BE SET TO "United_States"
SHIPPERINFO			REQUIRED TAG
SHIPPER	Y	6	MERCHANT'S 6 CHARACTER UPS ACCOUNT NUMBER
TERMS	Y		Must be set to "SHIPPER"
CURRENCYCODE	N		Must be set to "USD"
SHIPDATE	Y		Ship date formatted as either: mm/dd/yy or mm/dd/yyyy
SHIPMENTSERVICEOPTIONS	N		REQUIRED IF USING DECLARED VALUE OPTION
DECLAREDVALUE	N		Use if using Declared Value
CURRENCYCODE	N		Must be set to "USD"
MONETARYVALUE	N		UPS Declared Value Business Rules apply. Enter whole integer. For example $550.00 is entered as "550" or "550.00" – no dollar sign. Declared value limits are: ARS = $1000.00 Call Tag = $50,000.00
SHIPNOTIFICATION	N		REQUIRED IF ANY EMAIL NOTIFICATIONS ARE USED
EMAIL	N		Required Tag.
CONSIGNEEEMAIL	N		REQUIRED IF SENDING EMAIL NOTIFICATION TO CONSIGNEE
SHIPPEREMAIL	N		REQUIRED IF SENDING EMAIL NOTIFICATION TO MERCHANT SITE – enter Email address at Merchant where you want email sent
EMAILRETURNADDRESS	N		REQUIRED IF USING EMAIL –MUST BE *VALID* EMAIL ADDRESS AT MERCHANT

TAG	REQUIRED? Y or N	CHARACTER LENGTH MAX	DESCRIPTION
EMAILSUBJECT	N		REQUIRED IF USING EMAIL – TEXT THAT WILL APPEAR IN THE EMAIL'S SUBJECT WINDOW
EMAILMESSAGE	N		Required Tag if using any Email Notifications
EMAILMESSAGETEXT ARS Example---→ Call Tag Example-→	N		Sample of Actual text of email message. Example: <EMAILMESSAGETEXT>Your order number @SHIPPER_REFERENCE shipped on @SHIPDATE</EMAILMESSAGETEXT> <EMAILMESSAGETEXT>via @SERVICEFRIENDLYNAME with tracking number @TRACKING_NUMBER</EMAILMESSAGETEXT> <EMAILMESSAGETEXT> Please select this link: @LABEL_IMAGE_FILE_URL To view and print your document. </EMAILMESSAGETEXT> <EMAILMESSAGETEXT> Thank you for your patronage. </EMAILMESSAGETEXT> <EMAILMESSAGETEXT>Your order number @SHIPPER_REFERENCE shipped on @SHIPDATE</EMAILMESSAGETEXT> <EMAILMESSAGETEXT>via @SERVICEFRIENDLYNAME with tracking number @TRACKING_NUMBER</EMAILMESSAGETEXT> <EMAILMESSAGETEXT> A UPS CALL TAG HAS BEEN ISSUED FOR YOUR ORDER. A UPS DRIVER SHOULD STOP BY IN 2-3 BUSINESS DAYS TO PICKUP YOUR PACKAGE. Please re-seal the package and have it ready for UPS to pick up. </EMAILMESSAGETEXT> <EMAILMESSAGETEXT> Thank you for your patronage </EMAILMESSAGETEXT>
PACKAGES	Y		REQUIRED TAG
PKG	Y		REQUIRED TAG
PKGWEIGHT	Y		REQUIRED TAG
WEIGHTUNITS	Y		USE "LBS"
WEIGHTVALUE	Y		ACTUAL WEIGHT IN LBS. SYSTEM WILL APPLY BILLABLE WEIGHT. I.E. 15.2 LBS. WILL BE BILLED AT 16 LBS. If using Next Day or 2nd Day Air LETTER set the WEIGHTVALUE to 0.
DIMENSION	Y		Required Tag
DIMUNITS	Y		IN
DIMVALUE	Y		LxWxH – Enter actual package dimensions for all packages where Dimensional Weight or Oversize applies. For all others enter dimensions as "0x0x0" or "0 0 0".

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TAG	REQUIRED? Y or N	CHARACTER LENGTH MAX	DESCRIPTION
PACKAGING	Y		Value MUST be set to "CUSTOM" for all packages. For Next Day and 2nd Day Letters the value must be set to "LETTER". When using LETTER the WEIGHTVALUE element must be set to "0"..
REFERENCE	Y		REQUIRED TAG
CONSIGNEEREFERENCE	Y	29	CONSIGNEE'S REFERENCE NUMBER
SHIPPERREFERENCE	Y	29	SHIPPERS REFERENCE NUMBER
PACKAGESERVICEOPTIONS	Y		REQUIRED TAG
OVERSIZE	N		If package is Oversized use value "True" If not, use "False".
ADDITIONALHANDLING	N		If Additional Handling is Required use value "True" If not, use "false".
CALLTAG	Y		REQUIRED IF USING CALL TAG SERVICE
CALLTAG FLAG	Y		REQUIRED IF USING CALL TAG SERVICE. Value is "True" or "1" if using Call Tag. Set to "FALSE" if ARS.
CALLTAGDESCRIPTION	N	35	REQUIRED IF USING CALL TAG SERVICE – WILL CONTAIN DESCRIPTION OF GOODS BEING RETURNED
RETURNDELIVERY	Y		REQUIRED TAG
RETURNDELIVERYFLAG	Y		For ARS value is set to "TRUE" – for Call Tags value is set to "FALSE"
RETURNDELIVERYDESCRIPTION	Y	35	REASON FOR RETURN
LABELFORMAT			**MUST be included if ARS is used. Value must be: TANDATA_UPS_MAXICODE_US _DOMESTIC.STANDARD**
SHIPMENTSERVICE	Y		REQUIRED TAG
SCS	Y		PACKAGE SERVICE LEVEL Next Day Air = "TANDATA_UPS.UPS.NDA" 2nd Day Air = "TANDATA_UPS.UPS.2DA" 3 Day Select = "TANDATA_UPS.UPS.3DA" Ground = "TANDATA_UPS.UPS.GND" NOTE: these are the ONLY service levels available for *UPS Returns on the Web.*
CLOSEOUTMODE	Y		MUST BE SET TO "1" or "TRUE"
PACKAGEDETAIL	Y		MUST BE SET TO "1" or "TRUE"

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XML Shipment Request

Example with explanations of fields:

```
<?xml version="1.0" encoding="UTF-8"?>
<!---Prolog -XML Doctype name and DTD reference->
<!DOCTYPE SHIPMENTREQUEST SYSTEM "http://www.upsreturnservices.com/dtd/shipreqtest.dtd ">
<!--Opening tag-->
<SHIPMENTREQUEST>
        <!--Opening Login tag-->
        <LOGIN>
                <!--Login ID and Password assigned to you-->
                <LOGINID>UPSTEST</LOGINID>
                <PASSWORD>UPSTEST</PASSWORD>
        </LOGIN>
        <!--Start of DEFATTRIBUTES Section-->
        <DEFATTRIBUTES>
                <!--Start of CONSIGNEE Elements-->
                <CONSIGNEE>
                        <COMPANY>BRIAN DEIGNAN</COMPANY>
                        <ADDRESS1>75 SMITH ST</ADDRESS1>
                        <CITY>FARMINGDALE</CITY>
                        <STATEPROVINCE>NY</STATEPROVINCE>
                        <POSTALCODE>11735</POSTALCODE>
                        <COUNTRYSYMBOL>UNITED_STATES</COUNTRYSYMBOL>
                </CONSIGNEE>
                <SHIPPERINFO>
                        <!--Using the 6 Character UPS Account Number Assigned to you Returns on the WEB.--
>

                        <SHIPPER>123456</SHIPPER>
                </SHIPPERINFO>
                <TERMS>SHIPPER</TERMS>
                <!--SHIPDATE MUST BE FORMATTED mm/dd/yy or mm/dd/yyyy-->
                <SHIPDATE>07/27/00</SHIPDATE>
                <!--Shipment service options can include Declared Value -->
                <SHIPMENTSERVICEOPTIONS>
                        <!--CURRENCYCODE must always be set to USD-->
                        <DECLAREDVALUE>
                                <CURRENCYCODE>USD</CURRENCYCODE>
                                <MONETARYVALUE>220.00</MONETARYVALUE>
                        </DECLAREDVALUE>
                </SHIPMENTSERVICEOPTIONS>
                        <SHIPNOTIFICATION>
                                <EMAIL>
                                <!--CONSIGNEEEMAILCONSIGNEEEMAIL INDICATES THE EMAIL
ADDRESS OF MERCHANT'S CUSTOMER-->

                <CONSIGNEEEMAILCONSIGNEEEMAIL>ELI3BXD@UPS.COM</CONSIGNEEEMAILCONSIGNE
EEMAIL>
                                <!--SHIPPEREMAIL indicates the Email Address at the merchant where
notification will be sent.-->
                                <SHIPPEREMAIL>bdeignan@UPS.COM</SHIPPEREMAIL>
<!--EMAILRETURNADDRESS must be a valid email address at merchant. This is the address that an email will be
sent to if a user chooses "Reply" to their original email notification.-->
```

```
<EMAILRETURNADDRESS>ELI3BXD@UPS.COM</EMAILRETURNADDRESS>
                    <!--EMAILSUBJECT is the text that will appear in the "Subject" window of all
email notifications.-->
                    <EMAILSUBJECT>YOUR RETURNED ORDER AT
XYZ.COM</EMAILSUBJECT>
                    <EMAILMESSAGE>
        <!--EMAILMESSAGETEXT will contain the text and variables that merchant wants to appear in all email
notifications-->
        <EMAILMESSAGETEXT>Your order number @SHIPPER_REFERENCE shipped on
@SHIPDATE</EMAILMESSAGETEXT>
                            <EMAILMESSAGETEXT>via @SERVICEFRIENDLYNAME with
tracking number @TRACKING_NUMBER</EMAILMESSAGETEXT>
<EMAILMESSAGETEXT>Please select this link: @LABEL_IMAGE_FILE_URL To view and print your
document</EMAILMESSAGETEXT>
                    <EMAILMESSAGETEXT>Thank you for your
patronage</EMAILMESSAGETEXT>
                    </EMAILMESSAGE>
                </EMAIL>
            </SHIPNOTIFICATION>
        </DEFATTRIBUTES>
        <!--Start of the PACKAGES Elements-->
        <PACKAGES>
            <PKG>
<!--Package weight units always set to LBS, WEIGHTVALUE will be package actual weight..-->
                <PKGWEIGHT>
                    <WEIGHTUNITS>LBS</WEIGHTUNITS>
                    <WEIGHTVALUE>12.2</WEIGHTVALUE>
                </PKGWEIGHT>
                <!--DIMUNITS always set to IN and actual package dimensions in Dimvalue-->
                <DIMENSION>
                    <DIMUNITS>IN</DIMUNITS>
                    <!--Height, Width and Length dimensions. Entered either as "HxWxL" or "H W
L".-->
                    <DIMVALUE>2 2 5</DIMVALUE>
                </DIMENSION>
                <!--PACKAGING value MUST BE set to CUSTOM.-->
                <PACKAGING>CUSTOM</PACKAGING>
                <!--REFERENCE elements contain whatever reference fields the merchant deems
applicable-->
                <REFERENCE>
                    <CONSIGNEEREFERENCE>123556</CONSIGNEEREFERENCE>
                    <SHIPPERREFERENCE>UUH6754</SHIPPERREFERENCE>
                </REFERENCE>
<!--PACKAGE SERVICE OPTIONS – Oversize is either TRUE or FALSE, Additional Handling is either TRUE or
FALSE. CALLTAG is either TRUE or FALSE. CALLTAG will ONLY be TRUE if ARS is not used.
CALLTAGDESCRIPTION is where the description of the goods being returned is entered. -->
                <PACKAGESERVICEOPTIONS>
                    <OVERSIZE>FALSE</OVERSIZE>
                    <ADDITIONALHANDLING>FALSE</ADDITIONALHANDLING>
                    <!--CALLTAGDELIVERYFLAG will be set to TRUE for CALL TAG and
FALSE for ARS-->
                    <CALLTAG>
                        <CALLTAGFLAG>TRUE</CALLTAGFLAG>
```

```
                          <CALLTAGDESCRIPTION>15 BLUE
WIDGETS</CALLTAGDESCRIPTION>
                          </CALLTAG>
                          <!--RETURNDELIVERYFLAG will be set to TRUE for ARS and FALSE for
Call Tag.-->

                          <!--RETURNDELIVERYDESCRIPTION will contain the reason for return for
ARS. -->

                          <RETURNDELIVERY>

          <RETURNDELIVERYFLAG>FALSE</RETURNDELIVERYFLAG>

          <RETURNDELIVERYDESCRIPTION>NONE</RETURNDELIVERYDESCRIPTION>
                          </RETURNDELIVERY>
                          </PACKAGESERVICEOPTIONS>

          <LABELFORMAT>TANDATA_UPS_MAXICODE_US.DOMESTIC.STANDARD</LABELFORMAT
>
              </PKG>
</PACKAGES>
<SHIPMENTSERVICE>
          <!--SCS will contain the code used for specific levels-->
          <SCS>TANDATA.UPS.UPS.GND</SCS>
</SHIPMENTSERVICE>
<!--CLOSEOUTMODE will always be set to "1" -->
<CLOSEOUTMODE>1</CLOSEOUTMODE>
<!--PACKAGEDETAIL will always be set to TRUE-->
<PACKAGEDETAIL>TRUE</PACKAGEDETAIL>
</SHIPMENTREQUEST>
```

Example of XML Document – Request ARS

```
<%@ language=VBscript %>
<%
strPOSTURL = "http://www.upsreturnservices.com/sendittest.asp"
%>
<html>
<FORM action="<%=strPOSTURL%>" method=post>
<textarea name=XML id=XML rows=35 cols=80>
<?xml version="1.0"?>
<!DOCTYPE SHIPMENTREQUEST SYSTEM "http://www.upsreturnservices.com/dtd/shipreqtest.dtd ">
<!-- Example of ARS issued with email notification to consignee and merchant-->
<SHIPMENTREQUEST>
        <LOGIN>
                <LOGINID>UPSTEST</LOGINID>
                <PASSWORD>UPSTEST</PASSWORD>
        </LOGIN>
        <DEFATTRIBUTES>
                <CONSIGNEE>
                        <COMPANY>MEDLEY'S</COMPANY>
                        <CONTACT>JOE SMITH</CONTACT>
                        <ADDRESS1>123 MAIN ST</ADDRESS1>
                        <ADDRESS2>ACCOUNTING</ADDRESS2>
                        <CITY>FARMINGDALE</CITY>
                        <STATEPROVINCE>NY</STATEPROVINCE>
                        <POSTALCODE>11735</POSTALCODE>
                        <COUNTRYSYMBOL>UNITED_STATES</COUNTRYSYMBOL>
                </CONSIGNEE>
                <SHIPPERINFO>
                        <SHIPPER>123456</SHIPPER>
                </SHIPPERINFO>
                <TERMS>SHIPPER</TERMS>
                <CURRENCYCODE>USD</CURRENCYCODE>
                <SHIPDATE>07/12/00</SHIPDATE>
                <SHIPMENTSERVICEOPTIONS>
                        <DECLAREDVALUE>
                                <CURRENCYCODE>USD</CURRENCYCODE>
                                <MONETARYVALUE>0</MONETARYVALUE>
                        </DECLAREDVALUE>
                </SHIPMENTSERVICEOPTIONS>
                <SHIPNOTIFICATION>
                        <EMAIL>
                                <CONSIGNEEEMAIL>ELI3BXD@UPS.COM</CONSIGNEEEMAIL>
                                <SHIPPEREMAIL>JOE@XYZ.COM</SHIPPEREMAIL>

<EMAILRETURNADDRESS>BDS@XYZ.COM</EMAILRETURNADDRESS>
                                <EMAILSUBJECT>Your return authorization.</EMAILSUBJECT>
                                <EMAILMESSAGE>
                                        <EMAILMESSAGETEXT> YOUR ORDER NUMBER
@SHIPPER_REFERENCE SHIPPED ON @SHIPDATE</EMAILMESSAGETEXT>
                                        <EMAILMESSAGETEXT>VIA @SERVICEFRIENDLYNAME
WITH TRACKING NUMBER @TRACKING_NUMBER.</EMAILMESSAGETEXT>
                                        <EMAILMESSAGETEXT>Please select this image link:
@LABEL_IMAGE_FILE_URL  to view and print your document.</EMAILMESSAGETEXT>
```

```
                              <EMAILMESSAGETEXT>THANK YOU FOR USING MEDLEY'S
ONLINE RETURN SERVICE.</EMAILMESSAGETEXT>
                    </EMAILMESSAGE>
                    <!-- valid variables are :
                         For labels but NOT documents
                                   @LABEL_IMAGE_FILE_NAME
                                   @LABEL_IMAGE_FILE_URL
                                   @SHIPPER_REFERENCE
                                   @SHIPDATE
                                   @SERVICEFRIENDLYNAME
                                   @TRACKING_NUMBER
                         For Documents but NOT Labels
                                   @DOC_FILE_NAME
                                   @DOC_FILE_URL
                                   @DOC_FRIENDLYNAME
                         -->
                    </EMAIL>
               </SHIPNOTIFICATION>
          </DEFATTRIBUTES>
          <PACKAGES>
               <PKG>
                    <PKGWEIGHT>
                         <WEIGHTUNITS>LBS</WEIGHTUNITS>
                         <WEIGHTVALUE>12.1</WEIGHTVALUE>
                    </PKGWEIGHT>
                    <DIMENSION>
                         <DIMUNITS>IN</DIMUNITS>
                         <DIMVALUE>0X0X0</DIMVALUE>
                    </DIMENSION>
                    <PACKAGING>CUSTOM</PACKAGING>
                    <REFERENCE>
                         <CONSIGNEEREFERENCE>1122</CONSIGNEEREFERENCE>
                         <SHIPPERREFERENCE>PO 123</SHIPPERREFERENCE>
                    </REFERENCE>
                    <PACKAGESERVICEOPTIONS>
                         <OVERSIZE></OVERSIZE>
                         <ADDITIONALHANDLING></ADDITIONALHANDLING>
                         <CALLTAG>
                              <CALLTAGFLAG>FALSE</CALLTAGFLAG>
                              <CALLTAGDESCRIPTION></CALLTAGDESCRIPTION>
                         </CALLTAG>
                         <RETURNDELIVERY>
                              <RETURNDELIVERYFLAG>TRUE</RETURNDELIVERYFLAG>
     <RETURNDELIVERYDESCRIPTION>WRONG COLOR
</RETURNDELIVERYDESCRIPTION>
                         </RETURNDELIVERY>
                    </PACKAGESERVICEOPTIONS>
<LABELFORMAT>TANDATA_UPS_MAXICODE_US_DOMESTIC.STANDARD</LABELFORMAT>
               </PKG>
          </PACKAGES>
          <SHIPMENTSERVICE>
               <SCS>TANDATA_UPS.UPS.GND</SCS>
          </SHIPMENTSERVICE>
          <CLOSEOUTMODE>1</CLOSEOUTMODE>
```

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```
            <PACKAGEDETAIL>TRUE</PACKAGEDETAIL>
</SHIPMENTREQUEST>
</textarea><BR>
<input type=submit value="SEND">
<input type=hidden value="http://207.16.70.48/client/saveorder.asp" name="RETURNURL">
<input type=hidden name ="MERCHANTORDERNUMBER" value="PO123">
</form>
</html>
```

Example of XML Document – Request Call Tag

```
<%@ language=VBscript %>
<%
strPOSTURL = "http://www.upsreturnservices.com/sendittest.asp"
%>
<html>
<FORM action="<%=strPOSTURL%>" method=post>
<textarea name=XML id=XML rows=35 cols=80>
<?xml version="1.0"?>
<!DOCTYPE SHIPMENTREQUEST SYSTEM "http://www.upsreturnservices.com/dtd/shipreqtest.dtd ">
<!-- Example of CALL TAG issued with email notification to consignee and merchant-->
<SHIPMENTREQUEST>
        <LOGIN>
                <LOGINID>UPSTEST</LOGINID>
                <PASSWORD>UPSTESTPASSWORD>
        </LOGIN>
        <DEFATTRIBUTES>
                <CONSIGNEE>
                        <COMPANY>MEDLEY'S</COMPANY>
                        <CONTACT>JOE SMITH</CONTACT>
                        <ADDRESS1>123 MAIN ST</ADDRESS1>
                        <ADDRESS2>RETURNS DEPT</ADDRESS2>
                        <CITY>FARMINGDALE</CITY>
                        <STATEPROVINCE>NY</STATEPROVINCE>
                        <POSTALCODE>11735</POSTALCODE>
                        <COUNTRYSYMBOL>UNITED_STATES</COUNTRYSYMBOL>
                </CONSIGNEE>
                <SHIPPERINFO>
                        <SHIPPER>123456</SHIPPER>
                </SHIPPERINFO>
                <TERMS>SHIPPER</TERMS>
                <CURRENCYCODE>USD</CURRENCYCODE>
                <SHIPDATE>07/12/00</SHIPDATE>
                <SHIPMENTSERVICEOPTIONS>
                        <DECLAREDVALUE>
                                <CURRENCYCODE>USD</CURRENCYCODE>
                                <MONETARYVALUE>550</MONETARYVALUE>
                        </DECLAREDVALUE>
                </SHIPMENTSERVICEOPTIONS>
                <SHIPNOTIFICATION>
                        <EMAIL>
                                <CONSIGNEEEMAIL>ELI3BXD@UPS.COM</CONSIGNEEEMAIL>
                                <SHIPPEREMAIL>JOE@XYZ.COM</SHIPPEREMAIL>
```

```
<EMAILRETURNADDRESS>BDS@XYZ.COM</EMAILRETURNADDRESS>
            <EMAILSUBJECT>XYZ.COM will have you package picked up
shortly</EMAILSUBJECT>
            <EMAILMESSAGE>
                <EMAILMESSAGETEXT> YOUR ORDER NUMBER
@SHIPPER_REFERENCE SHIPPED ON @SHIPDATE</EMAILMESSAGETEXT>
                <EMAILMESSAGETEXT>VIA @SERVICEFRIENDLYNAME
WITH TRACKING NUMBER @TRACKING_NUMBER </EMAILMESSAGETEXT>
                <EMAILMESSAGETEXT>A UPS CALL TAG HAS BEEN ISSUED
FOR YOUR ORDER. UPS WILL BE BY TO PICK  UP YOUR PACKAGE  IN 2 TO 3 BUSINESS
DAYS.</EMAILMESSAGETEXT>
                <EMAILMESSAGETEXT>THANK YOU FOR USING MEDLEY'S
ONLINE RETURN SERVICE.</EMAILMESSAGETEXT>
            </EMAILMESSAGE>
        </EMAIL>
    </SHIPNOTIFICATION>
</DEFATTRIBUTES>
<PACKAGES>
    <PKG>
        <PKGWEIGHT>
            <WEIGHTUNITS>LBS</WEIGHTUNITS>
            <WEIGHTVALUE>12</WEIGHTVALUE>
        </PKGWEIGHT>
        <DIMENSION>
            <DIMUNITS>IN</DIMUNITS>
            <DIMVALUE>0X0X0</DIMVALUE>
        </DIMENSION>
        <PACKAGING>CUSTOM</PACKAGING>
        <REFERENCE>
            <CONSIGNEEREFERENCE>1122</CONSIGNEEREFERENCE>
            <SHIPPERREFERENCE>JKL998J765</SHIPPERREFERENCE>
        </REFERENCE>
        <PACKAGESERVICEOPTIONS>
            <OVERSIZE></OVERSIZE>
            <ADDITIONALHANDLING></ADDITIONALHANDLING>
            <CALLTAG>
                <CALLTAGFLAG>TRUE</CALLTAGFLAG>
                <CALLTAGDESCRIPTION>WRONG COLOR
SHIPPED</CALLTAGDESCRIPTION>
            </CALLTAG>
            <RETURNDELIVERY>

<RETURNDELIVERYFLAG>FALSE</RETURNDELIVERYFLAG>
                <RETURNDELIVERYDESCRIPTION>WRONG
ORDER</RETURNDELIVERYDESCRIPTION>
            </RETURNDELIVERY>
</PACKAGESERVICEOPTIONS>

    </PKG>
</PACKAGES>
<SHIPMENTSERVICE>
    <SCS>TANDATA_UPS.UPS.GND</SCS>
</SHIPMENTSERVICE>
```

```
        <CLOSEOUTMODE>1</CLOSEOUTMODE>
        <PACKAGEDETAIL>TRUE</PACKAGEDETAIL>
</SHIPMENTREQUEST>

</textarea><BR>
<input type=submit value="SEND">
<input type=hidden value="http://207.16.70.48/client/saveorder.asp" name="RETURNURL">
<input type=hidden name ="MERCHANTORDERNUMBER" value="PO123">
</form>
</html>
```

Example of XML Document – Request ARS FOR NDA LETTER

```
<%@ language=VBscript %>
<%
strPOSTURL = "http://www.upsreturnservices.com/sendittest.asp"
%>
<html>
<FORM action="<%=strPOSTURL%>" method=post>
<textarea name=xml id=xml rows=35 cols=80>
<?xml version="1.0"?>
<!DOCTYPE SHIPMENTREQUEST SYSTEM
"http://www.upsreturnservices.com/dtd/shipreqtest.dtd" >
<!-- Example of ARS NDA LETTER issued with email notification to consignee and merchant-->
<SHIPMENTREQUEST>
    <LOGIN>
        <LOGINID>UPSTEST</LOGINID>
        <PASSWORD>UPSTEST</PASSWORD>
    </LOGIN>
    <DEFATTRIBUTES>
        <CONSIGNEE>
            <COMPANY>MEDLEY'S</COMPANY>
            <CONTACT>JOE SMITH</CONTACT>
            <ADDRESS1>123 MAIN ST</ADDRESS1>
            <ADDRESS2>RETURNS DEPT</ADDRESS2>
            <CITY>FARMINGDALE</CITY>
            <STATEPROVINCE>NY</STATEPROVINCE>
            <POSTALCODE>11735</POSTALCODE>
            <COUNTRYSYMBOL>UNITED_STATES</COUNTRYSYMBOL>
        </CONSIGNEE>
        <SHIPPERINFO>
            <SHIPPER>123456</SHIPPER>
        </SHIPPERINFO>
        <TERMS>SHIPPER</TERMS>
        <CURRENCYCODE>USD</CURRENCYCODE>
        <SHIPDATE>07/12/00</SHIPDATE>
        <SHIPMENTSERVICEOPTIONS>
            <DECLAREDVALUE>
                <CURRENCYCODE>USD</CURRENCYCODE>
                <MONETARYVALUE>0</MONETARYVALUE>
            </DECLAREDVALUE>
        </SHIPMENTSERVICEOPTIONS>
        <SHIPNOTIFICATION>
```

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```
<EMAIL>
    <CONSIGNEEEMAIL>ELI3BXD@UPS.COM</CONSIGNEEEMAIL>
    <SHIPPEREMAIL>JOE@XYZ.COM</SHIPPEREMAIL>
    <EMAILRETURNADDRESS>BDS@XYZ.COM</EMAILRETURNADDRESS>
    <EMAILSUBJECT>Your return authorization.</EMAILSUBJECT>
    <EMAILMESSAGE>
        <EMAILMESSAGETEXT> YOUR ORDER NUMBER @SHIPPER_REFERENCE SHIPPED
ON @SHIPDATE</EMAILMESSAGETEXT>
        <EMAILMESSAGETEXT>VIA @SERVICEFRIENDLYNAME WITH TRACKING
NUMBER @TRACKING_NUMBER.</EMAILMESSAGETEXT>
        <EMAILMESSAGETEXT>Please select this image link: @LABEL_IMAGE_FILE_URL. to
view and print your document.</EMAILMESSAGETEXT>
        <EMAILMESSAGETEXT>THANK YOU FOR USING MEDLEY'S ONLINE RETURN
SERVICE.</EMAILMESSAGETEXT>
    </EMAILMESSAGE>
    <!-- valid variables are :
        For labels but NOT documents
            @LABEL_IMAGE_FILE_NAME
            @LABEL_IMAGE_FILE_URL
            @SHIPPER_REFERENCE
            @SHIPDATE
            @SERVICEFRIENDLYNAME
            @TRACKING_NUMBER
        For Documents but NOT Labels
            @DOC_FILE_NAME
            @DOC_FILE_URL
            @DOC_FRIENDLYNAME
    -->
</EMAIL>
</SHIPNOTIFICATION>
</DEFATTRIBUTES>
<PACKAGES>
    <PKG>
        <PKGWEIGHT>
            <WEIGHTUNITS>LBS</WEIGHTUNITS>
            <WEIGHTVALUE>0</WEIGHTVALUE>
        </PKGWEIGHT>
        <DIMENSION>
            <DIMUNITS>IN</DIMUNITS>
            <DIMVALUE>0X0X0</DIMVALUE>
        </DIMENSION>
        <PACKAGING>LETTER</PACKAGING>
        <REFERENCE>
            <CONSIGNEEREFERENCE>1122</CONSIGNEEREFERENCE>
            <SHIPPERREFERENCE>JKL998J765</SHIPPERREFERENCE>
        </REFERENCE>
        <PACKAGESERVICEOPTIONS>
            <OVERSIZE></OVERSIZE>
            <ADDITIONALHANDLING></ADDITIONALHANDLING>
            <CALLTAG>
                <CALLTAGFLAG>FALSE</CALLTAGFLAG>
                <CALLTAGDESCRIPTION></CALLTAGDESCRIPTION>
            </CALLTAG>
            <RETURNDELIVERY>
```

```
            <RETURNDELIVERYFLAG>TRUE</RETURNDELIVERYFLAG>
        <RETURNDELIVERYDESCRIPTION>OBTAINED APPROVALS ON CONTRACT
</RETURNDELIVERYDESCRIPTION>
                </RETURNDELIVERY>
            </PACKAGESERVICEOPTIONS>

    <LABELFORMAT>TANDATA_UPS_MAXICODE_US_DOMESTIC.STANDARD</LABELFORMAT>
        </PKG>
    </PACKAGES>
    <SHIPMENTSERVICE>
        <SCS>TANDATA_UPS.UPS.NDA</SCS>
    </SHIPMENTSERVICE>
    <CLOSEOUTMODE>1</CLOSEOUTMODE>
    <PACKAGEDETAIL>TRUE</PACKAGEDETAIL>
</SHIPMENTREQUEST>

</textarea><BR>
<input type=submit value="SEND">
<input type=hidden value="http://207.16.70.48/client/saveorder.asp" name="RETURNURL">
<input type=hidden name ="MERCHANTORDERNUMBER" value="PO123">
</form>
</html>
```

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3.6 Shipment Response

Response DTD

Upon receiving a successful REQUEST, **UPS Returns on the Web** will return a RESPONSE that conforms to the following DTD:

?xml version="1.0" encoding="UTF-8"?>

<!ELEMENT SHIPMENTRESPONSE (RESPONSE, RATEDSHIPMENT)>

<!ELEMENT RESPONSE (TRANSACTIONREFERENCE, RESPONSESTATUSCODE, RESPONSESTATUSDESCRIPTION)>

<!ELEMENT TRANSACTIONREFERENCE (CUSTOMERCONTEXT, XPCIVERSION)>

<!ELEMENT CUSTOMERCONTEXT (#PCDATA)>

<!ELEMENT XPCIVERSION (#PCDATA)>

<!ELEMENT RESPONSESTATUSCODE (#PCDATA)>

<!ELEMENT RESPONSESTATUSDESCRIPTION (#PCDATA)>

<!ELEMENT RATEDSHIPMENT (ERROR, SHIPMENTSERVICE, BILLINGWEIGHT, TOTALCHARGES, TRANSPORTATIONCHARGES, SERVICEOPTIONSCHARGES, DELIVERYINFO, RATEDPACKAGE)>

<!ELEMENT ERROR (ERRORCODE, ERRORDESCRIPTION)>

<!ELEMENT ERRORCODE (#PCDATA)>

<!ELEMENT ERRORDESCRIPTION (#PCDATA)>

<!ELEMENT SHIPMENTSERVICE (SCS, DESCRIPTION)>

<!ELEMENT SCS (#PCDATA)>

<!ELEMENT DESCRIPTION (#PCDATA)>

<!ELEMENT BILLINGWEIGHT (WEIGHTUNITS, WEIGHTVALUE)>

<!ELEMENT WEIGHTUNITS (#PCDATA)>

<!ELEMENT WEIGHTVALUE (#PCDATA)>

<!ELEMENT TOTALCHARGES (CURRENCYCODE, MONETARYVALUE)>

<!ELEMENT CURRENCYCODE (#PCDATA)>

<!ELEMENT MONETARYVALUE (#PCDATA)>

<!ELEMENT TRANSPORTATIONCHARGES (CURRENCYCODE, MONETARYVALUE)>

```
<!ELEMENT SERVICEOPTIONSCHARGES (CURRENCYCODE, MONETARYVALUE)>

<!ELEMENT DELIVERYINFO (SHIPDATE, GUARANTEEDDAYSTODELIVERY,
SCHEDULEDDELIVERYTIME,
ARRIVEDATE)>

<!ELEMENT SHIPDATE (#PCDATA)>

<!ELEMENT GUARANTEEDDAYSTODELIVERY (#PCDATA)>

<!ELEMENT SCHEDULEDDELIVERYTIME (#PCDATA)>

<!ELEMENT ARRIVEDATE (#PCDATA)>

<!ELEMENT RATEDPACKAGE (PKGERROR, PACKAGETOTALCHARGES, PACKAGEBASECHARGES,
PACKAGESERVICEOPTIONSCHARGES, TRACKINGNUMBER, REFERENCE, PKGWEIGHT,
BILLINGWEIGHT, LABELREQUESTINFO, LABELURL)#

<!ELEMENT PKGERROR (ERRORCODE, ERRORDESCRIPTION, LABELSTATUS, HTMLSTATUS,
EMAILSTATUS)>

<!ELEMENT LABELSTATUS (ERRORCODE, ERRORDESCRIPTION)>
```
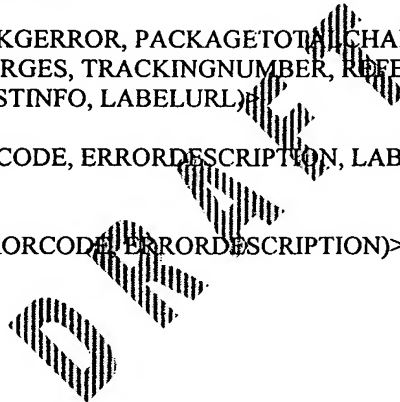
Shipment Response Elements – Field Explanations

The following table describes each of the elements contained in a shipment response that will be sent to the RETURNURL specified in the request.

TAG	VALUE	DESCRIPTION
SHIPMENTRESPONSE		Opening TAG
RESPONSE		Opening TAG
TRANSACTIONREFERENCE		Opening TAG
CUSTOMERCONTEXT	Local Mode Using TanData	System Generated Header
XPCIVERSION	1.0	System Generated Header
RESPONSESTATUSCODE		A value of 0 indicates success. A value of 2 indicates an error.
RESPONSESTATUSDESCRIPTION		Success or error.
RATEDSHIPMENT		Opening TAG
ERROR		Opening TAG
ERRORCODE	0	A value of 2 indicates an error.
ERRORDESCRIPTION	NO ERROR	Any possible error descriptions will appear here.
SHIPMENTSERVICE		Opening TAG
SCS		Shipper Service Level Code Possible values are: Next Day Air = "TANDATA_UPS.UPS.NDA" 2nd Day Air = "TANDATA_UPS.UPS.2DA" 3 Day Select = "TANDATA_UPS.UPS.3DS" Ground = "TANDATA_UPS.UPS.GND"
DESCRIPTION		UPS Friendly Name of this transaction
BILLINGWEIGHT		Opening TAG
WEIGHTUNITS	LBS	
WEIGHTVALUE		Billable weight in Lbs.
TOTALCHARGES-		Opening TAG
CURRENCYCODE	USD	
MONETARYVALUE		Value of Transportation Charges + Service option charges. Example: 3.02
TRANSPORTATIONCHARGES		Opening TAG
CURRENCYCODE	USD	
MONETARYVALUE		UPS Published Service Charge based on weight and zone. Example: 3.02
SERVICEOPTIONCHARGES		Opening TAG
CURRENCYCODE	USD	
MONETARYVALUE		UPS Published Accessorial Charges such as Declared Value and Call Tag.
DELIVERYINFO		Opening TAG
SHIPDATE		Mm/dd/yy
GUARANTEEDDAYSTODELIVERY	NONE	Not Applicable to ARS or Call Tag
SCHEDULEDDELIVERYTIME	NONE	Not Applicable to ARS or Call Tag
ARRIVEDATE	NONE	Not Applicable to ARS or Call Tag
RATEDPACKAGE		Opening TAG
PKGERROR		Opening TAG
ERRORCODE	0	A value of 0 indicates success.
ERRORDESCRIPTION	NO ERROR	Any Package Rating Errors
LABELSTATUS		Opening TAG

TAG	VALUE	DESCRIPTION
ERRORCODE	0	A value of 0 indicates success.
ERRORDESCRIPTION	NO ERROR	Any Label Creation Errors
HTMLSTATUS		Opening TAG
ERRORCODE	0	A value of 0 indicates success.
ERRORDESCRIPTION	NO ERROR	Any HTML Errors
EMAILSTATUS		Opening TAG
ERRORCODE	0	A value of 0 indicates success.
ERRORDESCRIPTION	NO ERROR	Any Email(SMTP) errors
PACKAGETOTALCHARGES		Opening TAG
CURRENCYCODE	USD	
MONETARYVALUE		Value of Transportation Charges + Service option charges. Example: 3.02
PACKAGEBASECHARGES		Opening TAG
CURRENCYCODE	USD	
MONETARYVALUE		UPS Published Service Charge based on weight and zone. Example: 3.02
PACKAGESERVICEOPTIONSCHARGES		Opening TAG
CURRENCYCODE	USD	
MONETARYVALUE		UPS Published Accessorial Charges such as Declared Value and Call Tag.
TRACKINGNUMBER	1Z1234560600000 001	Tracking Number assigned to this ARS/ Call Tag transaction
REFERENCE		Opening TAG
SHIPPERREFERENCE		Shipper's Reference number from Request File
CONSIGNEEREFERENCE		Consignee's Reference number from Request File
PKGWEIGHT		Opening TAG
WEIGHTUNITS	LBS	
WEIGHTVALUE		Actual Weight captured from SHIPMENTREQUEST. Example 0.2500
BILLINGWEIGHT		Opening TAG
WEIGHTUNITS	LBS	
WEIGHTVALUE		Billable Weight. Example 1.0000
LABELREQUESTINFO		Opening TAG
SHIPPER	123456	Shipper's UPS Account Number from Request File
SCS	TANDATA_UPS. UPS.GND	Carrier Service Level Code *See SCS reference above*
SC	TANDATA_UPS. UPS	Carrier Code
MSN		Master Sequential Number generated by Returns Application.
BUNDLEID		Bundle ID Number generated by Returns Application.
PACKAGELISTID		Package List ID Number generated by Returns Application.
POSTALCODE	92562-0000	Customer's Postal Code
RETURNDELIVERY		Opening TAG
RETURNDELIVERYFLAG	TRUE	Value from Request File –should always be TRUE
DIMENSION		Opening TAG
DIMUNITS	IN	"Inches"
DIMVALUE		Length x Width x Height of Package – from Request File
PACKAGING		Packaging Value for Request File. Acceptable values are "Custom" and Letter"
LABELURL		URL to post label image to. For example: http://150.105.32.66/server/x.com/links/4071.html

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Electronic Commerce

XML SHIPMENT RESPONSE

Example with explanations of fields:

```
<?xml version="1.0" encoding="UTF-8"?>
<!--Prolog- XML Doctype name and DTD reference-->
<!DOCTYPE SHIPMENTRESPONSE SYSTEM "D:\DTD\dtd_response1310.dtd">

<SHIPMENTRESPONSE>
        <RESPONSE>
                <!--System Generated Headers-->
                <TRANSACTIONREFERENCE>
                        <CUSTOMERCONTEXT>Local Mode Using TanData</CUSTOMERCONTEXT>
                        <XPCIVERSION>1.0</XPCIVERSION>
                </TRANSACTIONREFERENCE>
                <!--RESPONSESTATUSCODE of 0 indicates success-->
                <RESPONSESTATUSCODE>0</RESPONSESTATUSCODE>
                <!--Success message or error codes appear here-->
                <RESPONSESTATUSDESCRIPTION>Success</RESPONSESTATUSDESCRIPTION>
        </RESPONSE>

        <RATEDSHIPMENT>
                <ERROR>
                        <!--ERRORCODE 0 indicates success or error text displayed in ERRORDESCRIPTION-
->
                        <ERRORCODE>0</ERRORCODE>
                        <ERRORDESCRIPTION>No error</ERRORDESCRIPTION>
                </ERROR>
                <!--SCS indicates Carrier Service Level.-->
                <SHIPMENTSERVICE>
                        <SCS>TANDATA_UPS.UPS.GND</SCS>
                        <DESCRIPTION>UPS Ground</DESCRIPTION>
                </SHIPMENTSERVICE>
                <BILLINGWEIGHT>
                        <WEIGHTUNITS>LBS</WEIGHTUNITS>
                        <WEIGHTVALUE>1.0000</WEIGHTVALUE>
                </BILLINGWEIGHT>
                <!--Total Charges = Transportation + Service  Option Charges-->
                <TOTALCHARGES>
                        <CURRENCYCODE>USD</CURRENCYCODE>
                        <MONETARYVALUE>3.02</MONETARYVALUE>
                </TOTALCHARGES>
                <!--Transportation Charges calculated by weight and zone - published rates-->
                <TRANSPORTATIONCHARGES>
                        <CURRENCYCODE>USD</CURRENCYCODE>
                        <MONETARYVALUE>3.02</MONETARYVALUE>
                </TRANSPORTATIONCHARGES>
                <!--Service Option Charges are published rate charges for either Declared Value or Call Tag
Charges-->
                <SERVICEOPTIONSCHARGES>
                        <CURRENCYCODE>USD</CURRENCYCODE>
                        <MONETARYVALUE>0.00</MONETARYVALUE>
                </SERVICEOPTIONSCHARGES>
                <DELIVERYINFO>
```

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<!--Date of Transaction (note: transactions on Web may take place over a weekend or holiday. **Date reflected in this field will be UPS next scheduled date of service.**-->
                                                                 <SHIPDATE>7/11/00</SHIPDATE>
                                                                  <!--Guaranteed, Scheduled and Arrive Dates do not apply to returns service.-->

        <GUARANTEEDDAYSTODELIVERY>None</GUARANTEEDDAYSTODELIVERY>
            <SCHEDULEDDELIVERYTIME>None</SCHEDULEDDELIVERYTIME>
            <ARRIVEDATE>None</ARRIVEDATE>
        </DELIVERYINFO>
        <RATEDPACKAGE>
<!--The following are for Error reporting. Each of these levels could potentially have errors. Errors are reported at each level (if any).-->
          <PKGERROR>
              <ERRORCODE>0</ERRORCODE>
              <ERRORDESCRIPTION>No error</ERRORDESCRIPTION>
              <LABELSTATUS>
                  <ERRORCODE>0</ERRORCODE>
                  <ERRORDESCRIPTION>No error</ERRORDESCRIPTION>
              </LABELSTATUS>
              <HTMLSTATUS>
                  <ERRORCODE>0</ERRORCODE>
                  <ERRORDESCRIPTION>No Error</ERRORDESCRIPTION>
              </HTMLSTATUS>
              <EMAILSTATUS>
                  <ERRORCODE>0</ERRORCODE>
                  <ERRORDESCRIPTION>No error</ERRORDESCRIPTION>
              </EMAILSTATUS>
          </PKGERROR>
          <PACKAGETOTALCHARGES>
              <CURRENCYCODE>USD</CURRENCYCODE>
              <MONETARYVALUE>3.02</MONETARYVALUE>
          </PACKAGETOTALCHARGES>
          <PACKAGEBASECHARGES>
              <CURRENCYCODE>USD</CURRENCYCODE>
              <MONETARYVALUE>3.02</MONETARYVALUE>
          </PACKAGEBASECHARGES>
          <PACKAGESERVICEOPTIONSCHARGES>
              <CURRENCYCODE>USD</CURRENCYCODE>
              <MONETARYVALUE>0.00</MONETARYVALUE>
          </PACKAGESERVICEOPTIONSCHARGES>
<!--UPS TRACKING NUMBER assigned to this transaction (ARS or Call Tag label).-->
<TRACKINGNUMBER>1Z4X11X50600036835</TRACKINGNUMBER>
<!--REFERENCE numbers as indicated in REQUEST.-->
<REFERENCE>
          <SHIPPERREFERENCE>ORDER: 6435136</SHIPPERREFERENCE>
          <CONSIGNEEREFERENCE>RMA: 277754</CONSIGNEEREFERENCE>
</REFERENCE>
<!--Package ACTUAL weight.-->
<PKGWEIGHT>
          <WEIGHTUNITS>LBS</WEIGHTUNITS>
          <WEIGHTVALUE>0.2500</WEIGHTVALUE>
</PKGWEIGHT>
<!--Package BILLABLE weight.-->
<BILLINGWEIGHT>

```
                    <WEIGHTUNITS>LBS</WEIGHTUNITS>
                    <WEIGHTVALUE>1.0000</WEIGHTVALUE>
            </BILLINGWEIGHT>
            <LABELREQUESTINFO>
                    <SHIPPER>123456</SHIPPER>
                    <SCS>TANDATA_UPS.UPS.GND</SCS>
                    <SC>TANDATA_UPS.UPS</SC>
                    <!--MSN, BUNDLEID and PACKAGELISTID are system produced transaction
references-->

                    <MSN>4071</MSN>
                    <BUNDLEID>7997</BUNDLEID>
                    <PACKAGELISTID>4245</PACKAGELISTID>
                    <POSTALCODE>92562-0000</POSTALCODE>
                    <!--RETURNDELIVERY FLAG set to TRUE indicates ARS transaction-->
                    <RETURNDELIVERY>
                            <RETURNDELIVERYFLAG>TRUE</RETURNDELIVERYFLAG>
                            <DIMENSION>
                                    <DIMUNITS>IN</DIMUNITS>
                                    <DIMVALUE>0x0x0 </DIMVALUE>
                            </DIMENSION>
                            <PACKAGING>CUSTOM</PACKAGING>
                    </RETURNDELIVERY>
            </LABELREQUESTINFO>
            <!--LABELURL indicates location where label image is located.-->
                    <LABELURL>http://150.105.32.66/Server/x.com/Links/4071.html</LABELURL>
            </RATEDPACKAGE>
    </RATEDSHIPMENT>
</SHIPMENTRESPONSE>
```

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3.6 Error Codes

Error Code Listing

The following is a list of error codes that could be returned in the SHIPMENTRESPONSE:

Select Case (code)
Case "0"
ErrorMessage = "No Error"

ERROR CODES 600-699
Case "608"
ErrorMessage = "Document Not Recognized."

Case "609"
ErrorMessage = "Unable to process request"

Case "610"
ErrorMessage = "Unable to process one or more line items"

Case "611"
ErrorMessage = "Unable to process one or more packages"

ERROR CODES 2401-2429
Case "2401"
ErrorMessage = "Invalid Document Type. Verify Label Format and Send LabelRequest."

Case "2402"
ErrorMessage = "Invalid Weight Units for specified Merchant
Profile"

Case "2403"
ErrorMessage = "Invalid Currency Units for specified
Merchant Profile"

Case "2404"
ErrorMessage = "Insufficient Consignee information"

Case "2405"
ErrorMessage = "Invalid Shipper"

Case "2425"
ErrorMessage = "Not generated due to previous error"

Case "2426"
ErrorMessage = "HTML Link File not generated due to unknown error"

Case "2427"
ErrorMessage = "Label and/or Label Image File not generated due to unknown error"

Case "2428"

ErrorMessage = "Not Requested"

Case "2429"
ErrorMessage = "Email Message not sent due to unknown SMTP error."

ERROR CODES 2430-2475

Case "2431"
ErrorMessage = "Partial Success. See individual package details."

Case "2435"
ErrorMessage = "No Label available for this carrier service."

Case "2436"
ErrorMessage = "No Shipment Data Received."
Case "2437"

ErrorMessage = "Unable to Process Request. Insufficient Data
Received."

Case "2440"
ErrorMessage = "Partial Success. See Individual Error Codes for Details."

Case "2441"
ErrorMessage = "Invalid Login ID. Verify Login ID with
System Administrator."

Case "2442"
ErrorMessage = "Value for NUMTX is either missing or non-numeric."

Case "2459"
ErrorMessage = "Array Validation Error, unable to process request."

Case "2466"
ErrorMessage = "CLOSEOUTITEM was either not given or is not valid. Specify a valid CLOSEOUTITEM to
continue with closeout."

Case "2469"
ErrorMessage = "CLOSEOUTMODE was either not given or is not valid. CLOSEOUTMODE takes the value of
either 0 (Both), 1 (Released), or 2 (Hold)."

Case "2471"
ErrorMessage = "MSN was either not given or is not valid.
Specify a valid MSN to continue."

Case "2472"
ErrorMessage = "Multiple Errors Occurred. See
Individual Error Codes for Details."
Case Else
ErrorMessage = "Undefined Error"

Chapter 4 - UPS Returns on the Web Implementation

4.1 Systems Testing Schedule

TBD

4.2 Information Systems Auditing

The merchant will audit results for accuracy at each stage of deployment and verify the service results meet the requirements of their business rules. This verification process includes the scheduling of all test date and internal resources needed to conduct tests. Internally, audits should be performed by the merchant whenever back end systems affecting financing, inventory, shipping, billing, refunds, and credits are integrated with the **Returns on the Web** service.

4.3 Product Release and Follow-up

The deployment representative will schedule follow-up meetings with the merchant after each test phase during the implementation to discuss results, errors and possible corrective actions. After the Returns on the Web service has been implemented, the UPS deployment team will schedule a 15 day and 30 day follow-up meeting to review post-implementation issues.

Chapter 5 – Post Implementation

5.1 Merchant Questionnaire

The deployment representative will deliver a questionnaire to be used by both the merchant, and if possible, the merchant's customers 30 days following implementation. The questions will relate to the returns process and cover site appearance and design, ease-of-use, ease of deployment, service reliability, quality of information, and the service offered by the UPS Returns on the web Deployment team. This feedback will guide UPS serve to in improving e the existing service and in developing future offerings.

UPS OnLine® Tools

Returns on the Web
XML Tool

XPCI™ Version 1.0001
Documentation Date: March 15, 2001

Developer's Guide

EXHIBIT C

Notice

In all communications with UPS concerning this document, please refer to the XPCI version and document date located on the cover of this developer's guide.

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Welcome

Welcome

Welcome to the *UPS OnLine® Tools Developer's Guide*. This guide explains how to integrate your e-commerce applications with the installation of UPS OnLine Tools, XML version. You may visit http://www.ec.ups.com for more information about Returns on the Web.

Contents at a Glance

- "Product Overview" provides an introduction to the UPS OnLine Tools.
- "General Programming Information" provides essential information on integrating your e-commerce applications with UPS OnLine Tools.
- "Returns on the Web" < insert description here>
- "Customer Integration" describes the process for integration testing of your application.
- "Appendices" contains the glossary, tables, and frequently asked questions (FAQs).
- "Bibliography" contains reference materials for this guide.
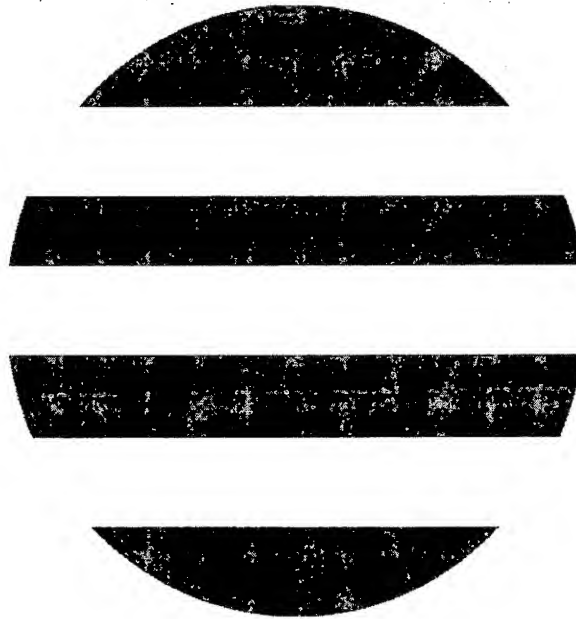
Product Overview

Product Overview

UPS Returns on the Web

Introduction

Improve your online customer service with UPS Returns On The Web, available in the latest XML technology. This powerful UPS OnLine Tool provides your customers with the option to return a product using the same technology to which they submitted the purchase.

You can know track a return package while making your customers return experience more pleasant.

With UPS Returns On The Web, You Can:

- Provide your customers with return options.
- Improve customer service by giving your inventory management system consistent, up-to-date shipping information.

Your Customers Can:

- Receive return delivery options when returning a package.
- Receive a prepaid return label.
- Arrange for a package pickup time.

For more information on UPS OnLine Tools, including UPS Returns On The Web, please visit http://www.ec.ups.com.

Tool Overview

The "Returns on the Web" service offering is initiated by a Merchant request for an UPS Return Service. After the request is received and processed, the response includes shipping data and an electronic label to the Merchant. The Merchant can then integrate carrier data with order information and pass the label to their customer via e-mail, or the customer's browser. The value provided is a result of the integration of a Merchant's technology with UPS technology. Each solution will be slightly different according to each Merchant's returns business rules.

Returns on the Web service originates from the End Consumer requesting return service using the phone or the Merchant's Web site. The return request will generate a label to facilitate returning the packages to the correct vendor. In the event the Consumer or Merchant does not receive the label or misplaces the shipment label, the Returns on the Web Label Recovery tool contains the ability to recover the label up to 30 days from the request using either the Tracking Number or the Reference Number and Shipper Number. Labels can be generated in real-time and be instantly ready for printing from browser or be sent via e-mail.

This release of the tool will not support Hazardous Materials and WorldWide Returns. The March release of Returns On The Web only facilitates returns for US 50.

Maintaining Your Profile

As your e-commerce site continues to evolve, UPS OnLine Tools will evolve, too, offering more features and service benefits for your online customers. Once you have registered to use UPS OnLine Tools, UPS will notify you by e-mail of all updates and changes to the tools. It is essential that an accurate e-mail address for your company be maintained. You should update your profile when changes occur or responsibilities for the Tools shift within your company. You can also return to the UPS e-commerce site to receive the latest updated information about UPS OnLine Tools.

License Agreements

The license agreements define the necessary business obligations of both UPS and the Licensee. Some of the reasons your entire team should be knowledgeable of the licensing requirements include:

- The license agreements have requirements that impact how programmers use and display information (e.g., regarding appropriate use of data and logos).
- The license agreements are different depending on how you use the UPS OnLine Tools (e.g., as an end-user or third party developer).

Usage Requirements

As part of the UPS OnLine Tools legal agreements, users of the Tools have certain obligations that are spelled out within the Tools agreement and its exhibits. Regardless of the manner in which the UPS OnLine Tools are integrated into your specific e-commerce web site or enterprise application, you must adhere to the Usage Requirements of the Tools legal agreement accepted by your company. Reference your OnLine Tools legal agreement for complete details of both parties' obligations. The following highlights a few of these usage requirements.

Branding Requirements

UPS should receive attribution and branding in all applications (including websites and software applications) that use the OnLine Tools. No End User, Third Party Developer or Access User should be permitted to use the OnLine Tools without providing branded recognition to UPS. Your use of the UPS logo can in no way imply endorsement, sponsorship or certification of your e-commerce web site or enterprise application by UPS. You are not allowed to use or alter the information returned by the UPS OnLine Tool in a way that misrepresents the information or the functionality of the tool.

Security Elements

To access the UPS OnLine Tools web site and use the product, several security elements are required including a User ID and password, developer key and access key. Some premium tools require additional information and special processes in order to be implemented. Various Tool users may be licensed and provided access to the products in different ways.

If you have licensed the tools through the "Get Tools" page on http://www.ec.ups.com, all security elements will be obtained via the web site. If you have received the tools documents through other authorized means, your UPS OnLine Tools contact will provide you with the security elements you need to proceed. This document describes the process completed via the UPS OnLine Tools web site.

These security elements are confidential and can not be shared with other companies or third parties. Sharing these elements with third parties is strictly prohibited as expressed in the UPS OnLine Tools license agreements.

Implementation of Security Elements

In order to be authorized by UPS to obtain any Tool's documentation, you or someone in your company has already completed the appropriate UPS OnLine Tool's licensing process. These steps initially control your access to the http://www.ec.ups.com web site and technical documentation. Once you implement your Tool's enabled EC solution, various security elements must be provided to UPS systems at run-time. The following steps are needed for your software to effectively support the UPS licensing process:

1. Create a Tools User ID and Password.
2. License the Tools and receive your Developer Key.
3. Get a XML Access Key.
4. Build your EC solution.
5. Test your EC solution.
6. Go into production with your Tool's enabled EC solution.

1. Create a Tools User ID and Password.

Customers integrating the UPS OnLine Tools must complete the registration process on the "Get Tools" section at http://www.ec.ups.com to obtain a User ID and Password. This ID controls access to the web site and allows developers to stay informed about the latest OnLine Tools updates and enhancements. A User ID and Password will also be required with each input request a user makes to an UPS Server while using an XML Tool. It is important to note that every time a developer changes their password on the web site they will have to update any program that has the Tools embedded. It is recommended that users do not use an existing MyUPS.Com ID. UPS recommends you keep your MyUPS.Com ID separate from your Tools User ID.

For the Premium XML Tools (e.g., Shipping and Signature Tracking) additional data has to be associated with your User ID being passed with each transaction. For Shipping, you must have a valid Shipper Number(s) associated with the Registration ID. For Signature Tracking you must have a PIN(s) associated with your Registration ID. The special requirements are detailed in the Shipping and Signature Tracking Documentation. To be approved for the Premium Tools a registered user submits a request form on the "Get Tools" portion of http://www.ec.ups.com. If approved users will be granted access to the premium Tool documentation through the web site.

For participants in the UPS OnLine Tools Third Party Developer Program or other advanced users that have a large number of Registration ID's to set up, UPS can provide an XML interface to the Registration system.

2. License the Tools and receive your Developer Key.

For a U.S. End-user, you must login to http://www.ec.ups.com with the User ID and Password. A license agreement must be accepted on the "Get Tools" portion of http://www.ec.ups.com before gaining access to the Tools documentation. After accepting the appropriate Tools licensing agreement, a Developer Key will be e-mailed to the registered user. You need to permanently save a copy of your Developer Key for future reference. A valid Developer Key is needed to obtain an Access Key and will be needed for technical support. The developer key identifies the company and contact that is building the EC solution.

3. Get a XML Access Key.

You must pass an XML Access Key with each input request to the UPS OnLine Tools server. You can obtain your XML Access Key on the "Get Access Key" section of http://www.ec.ups.com. A Developer Key is required to get an Access Key. Each Access Key identifies each site where the Tool has been deployed.

Once you review the technical documentation, you must plan your strategy for those Access Keys you need. There are separate Access Keys for the HTML and XML Tools. Additionally, UPS recommends each site implementation of your EC solution have separate Access Keys. An example would be a company that is implementing the Tools into three parts of their organization in three different cities. In this case, it is recommended that you obtain three separate Access Keys to uniquely identify each site.

If you have requested use of the Premium Tools, do not request an Access Key until after you received confirmation from UPS that your Premium Tool request has been approved.

For participants in the UPS OnLine Tools Third Party Developer Program or other advanced End-users that have a large number of Access Keys to set up, UPS can provide an XML interface to the Get Access Key process.

4. Build your EC solution.

Imbed your User ID & password and Access Key into your Tools enabled EC solution.

5. Test your EC Tool implementation.

To ensure that your Tool's enabled EC solution works properly we provide sample code, DTD's and example XML documents. These can be found in the "How To" files for each Tool.

For the Premium XML Tools (e.g., Shipping and Signature Tracking), additional interactions and approvals with UPS are required before you go into production. Details of what to do and who to contact are contained in the documentation of each premium Tool.

6. Go into production with your Tools enabled for implementation.

Architecture Configuration

Your applications communicate via the Internet with the UPS OnLine Tools server that implements all functionality.

Communication

An e-commerce application invokes UPS OnLine Tools by initiating Hypertext Transfer Protocol (HTTP) communication with the server hosting UPS OnLine Tools. HTTP is an application-level protocol for distributed, collaborative, and hypermedia information systems. HTTP is also a generic protocol used to communicate from user agents and proxies/gateways to other Internet systems, including those supported by SMTP, NNTP, FTP, Gopher, and WAIS. HTTP allows a user to readily exchange XML-formatted messages.

UPS OnLine Tools use secure HTTP (HTTPS) for your protection and for the protection of UPS. The secure transmission ensures that the sender and receiver are the only parties able to decode a transmission. Encrypting the HTTP protocol through a Secure Socket Layer (SSL) socket performs HTTPS. Third-party sockets are available from a number of vendors.

All interactions with the UPS OnLine Tools server are through the HTTP POST method. The HTTP message content is formatted as an XML document.

UPS OnLine Tools supports HTTP 1.0 and 1.1 protocol (refer to HTTP specifications at http://www.w3.org/Protocols/rfc1945/rfc1945).

XML

Extensible Markup Language (XML) is an open standard for defining markup languages to represent structured information over the web. XML documents are used for business-to-business communication and data interchange between dissimilar systems. Network transfer occurs with standard HTTP over TCP/IP.

UPS OnLine Tools uses XML documents to communicate with your applications. XML, like its cousin HTML, is a subset of Standard Generalized Markup Language (SGML). Whereas HTML is used to tag words, pictures, and other media so that they can be rendered the same way by different browsers, XML is used to tag documents and data so that different software consumers can interpret them without ambiguity.

For example, consider the following text:

```
1Z0597X90219590035
```

This string can be interpreted in many ways—an invoice number, a purchase order number, or random sequence of characters (noise). Using XML to tag the string removes the ambiguity:

```
<TrackingNumber>1Z0597X90219590035</TrackingNumber>
```

The tagging mechanism of XML guarantees that if documents are structured properly, the data can always be parsed.

UPS OnLine Tools supports XML 1.0 specification (http://www.w3.org/TR/1998/REC-xml-19980210.html)

XML Package Carrier Interface

XML Package Carrier Interface (XPCI) defines a vocabulary and structure for describing packages, shipments, and the activity details for package carriers and their customers. XPCI is a set of DTDs that defines the terminology, transaction enveloping, and XML message definitions. For a client to be XPCI-compliant, the client must generate a well-formed XML message that validates against the XPCI DTDs.

Several DTDs, organized into three categories, define XPCI:

- Vocabulary—This DTD defines the basic business vocabulary of XPCI. All tags used in a message are defined in this DTD.

- Interchange—This DTD defines the transaction-enveloping scheme. Every message includes transaction information.

- Message—Each message has an associated DTD that defines the vocabulary of the message.

DTDs

A Document Type Definition (DTD) is a set of rules that specifies how to use XML markup. It contains specs for each element, including what the element's attributes are, what values the attributes can take on, and what elements can be contained in others. Trading partners uses DTDs as interface contracts (for example, input/ output specifications that programmers use to craft software). DTDs are also used by software to validate the syntax of XML documents. DTDs are available on the http://www.ec.ups.com website.

Product Overview

General Programming Information

General Programming Information

Integration Requirements

To integrate UPS OnLine Tools into your e-commerce applications, you must develop custom code that adapts your application's business logic and data to UPS OnLine Tools. You can use any programming language that supports HTTP communication across Internet socket and secure connections, such as Java, Visual Basic, or C++ .

1. You will need to know how to program URL or socket connections. There are several ways you can do this. Which method you choose will depend on your application platform and programming language. For example, if you program in Java on any platform, you could use the URLConnection Class, which is part of the Java Development Kit. Alternatively, Microsoft supplies several components for use with Visual Basic and ASP (VBScript).

2. You will need to obtain, or write, a secure socket implementation that supports the SSL standard for secure communications. UPS OnLine Tools requires secure HTTP (HTTPS). This data security is required for the protection of both the client application and UPS; sensitive (billing-related) data is being transferred back and forth across the public Internet.

3. You will need to know how to encode and decode XML documents. To program XML documents, you'll probably want to use an XML parser, which provides an Application Programming Interface (API) for manipulating XML documents. There are several XML parsers available as freeware, as well as commercial software products. (See Bibliography for more information.)

4. You will need to design a strategy into your software for handling errors. Consider that there are three types of errors: hard errors, transient errors, and warnings. For a smoothly running application you must decide how you handle each type of error. In some cases it may be appropriate to display the error to the user. On the other hand, if there is no GUI in your application, your software must decided what to do. For instance, if you are designing a GUI interface, you must decide whether to show transient errors or simply retry the request behind the scenes. In all cases, we will supply an error number and a natural language error message.

5. You will need to establish a connection to the Internet from the computer that runs your e-commerce application. You also need to establish Internet access with your own Internet Service Provider.

Planning the OnLine Tools Integration

A successful implementation of the UPS OnLine Tools depends on many factors. It is important that you have the appropriate tools to work with the platform you are integrating with, the appropriate skill set (XML knowledge and/or experience) as well as a project plan and design. The following checklist should aid in the process:

1. Obtain user ID, password and developer's key from http:/ec.ups.com/ecommerce. (See "Security Elements" in the Product Overview section.)

2. Obtain documentation and the corresponding "How To" file for the tool you wish to implement.

3. Carefully review the documentation.

4. Obtain parser and utility software for SSL. For tools returning graphic images (Signature Tracking and Shipping), obtain software for Base64 Encoding.

5. Determine how your application will connect to the Internet. This may involve discussions with your network administrator and/or network security staff.

6. Develop a plan for error handling.

7. Develop your application.

8. Obtain Access Key. (See "Security Elements" in the Product Overview section.)

9. Perform integration testing with the UPS OnLine Tools server.

10. For Signature Tracking and Shipping, follow the product certification process identified in the Customer Integration Environment section.

11. Launch your application.

Communication

An application invokes UPS OnLine Tools by initiating HTTP communication with the server hosting UPS OnLine Tools. All interactions with the host server are through the HTTP POST method. The HTTP message content sent is formatted as an XML document.

Applications connected to the Internet can connect directly to UPS OnLine Tools at the HTTPS port 443, by opening either a secure TCP/IP socket or secure URL connection. Applications send request data to UPS OnLine Tools by writing data to the TCP/IP socket or URL connection. The request data must be formatted as a valid XML request message and adhere to the HTTP protocol. Applications receive the response data from UPS OnLine Tools by reading data from the same TCP/IP socket or URL connection.

HTTPS is accomplished by using the HTTP protocol using a secure (SSL) socket. You must obtain an SSL package that supports the RSA encryption algorithm in order to communicate with the UPS OnLine Tools server.

Invoking UPS OnLine Tools via XML

An application creates an XML document containing the content required by the interface to be invoked. The application also provides the access tokens needed for the interface to be invoked. The application must know which URL to use to access the desired interface.

Upon establishing connection with the URL, the application sends the HTTP message to the URL using the POST method. The request HTTP message consists of a header section and a content section. The header section specifies the HTTP method (POST), the content type (application/xml), the content length, and so on, as per HTTP 1.0 or 1.1 specification. The content of the HTTP message is the XML document containing the data needed for the interface to be invoked. The application waits for a response.

The interface receives the HTTP content, and attempts to parse the received XML document and perform the requested action.

The interface generates new XML content to be returned to the application. The content type is set to application/xml. The response is returned to the HTTP server, which sends it to the application.

The application, upon receiving the response, extracts the content according to the content type, and evaluates the response to determine if the desired service was rendered.

Base64 Encoding

Note: Base64 Encoding is only required for Signature Tracking and Shipping.

Base64 encoding is used to preserve binary data. The UPS OnLine Tools server uses Base64 encoding to preserve images. Listed below are links to help you better understand Base64 encoding.

- This details Sun's interface in one of its packages that codes and decodes Base64

  http://java.sun.com/products/commerce/release_10ea1/api/Package-javax.commerce.util.html

- This link contains a detailed discussion of the RFC and its implications

  http://www.freesoft.org/CIE/RFC/1521/7.htm

- These sites offer classes, which code and decode Base64. We have not tested, much less investigated these, and suggest you do your own search and due diligence investigations.

  http://www.fourmilab.ch/webtools/base64/

  http://www.davecentral.com/7202.html

Secure Socket Layer (SSL)

SSL technology is used to protect sensitive data while traveling over public domains. UPS requires you to use SSL for all transactions. The following sites contain more information on SSL. They are listed for your convenience. UPS does not endorse these sites or products in any way.

- These Sun sites contain a good guide to SSL issues, one for JDK 1.1, the other for JDK 1.2:

  http://java.sun.com/products/jdk/1.2/docs/guide/rmi/SSLInfo.html

  http://java.sun.com/security/ssl/API_users_guide.html

  http://www.phaos.com/solutions.html

- This site is the home for a free SSL implementation written in Java. These are listed for your convenience.

  http://speedy.rtfm.com/puretls/

- These sites offer licensed SSL implementations for Java.

  http://www.certicom.com/products/sslplus_java.html

  http://www.alphaworks.ibm.com

UPS OnLine Tools support the following browsers:

- Netscape Navigator 3.0 and later
- Microsoft Internet Explorer 3.02 and later
- America Online 3.0 and later

XPCI

XML Package Carrier Interface (XPCI) defines a vocabulary and structure for describing packages, shipments, and the activity details for package carriers and their customers. XPCI is a set of DTDs that defines the terminology, transaction enveloping, and XML message definitions. For a client to be XPCI-compliant, the client must generate a well-formed XML message that validates against the XPCI DTDs.

UPS OnLine Tools demand as a pre-condition that all messages be XPCI-compliant. This means that each message must validate against its corresponding DTD, however, the XML message itself should not contain a DOCTYPE. UPS OnLine Tools do not use the XML DOCTYPE reference.

Connecting and Messaging

To invoke UPS OnLine Tools:

1. Open a secure TCP/IP socket or secure URL connection using the connection address for the interface to be invoked.

2. Create an XML request message. All messages must be XPCI-compliant.

3. Send the XML request message to the tool. To send a request message to a tool, an application writes a stream of data to the tool via a secure TCP/IP socket or secure URL connection. The data stream must be in the form of an HTTP POST request message.

4. Receive the XML response message from the tool. To read a response from a tool, an application reads the response in XML format via a secure TCP/IP socket or secure URL connection.

5. Parse the XML response message to retrieve data.

6. Identify and handle error conditions.

Transaction Framework

The XPCI defines a common element found on all transactions. This container node, labeled TransactionReference, contains the transaction specific information CustomerContext and XPCI Version.

XpciVersion controls a transaction language's version separately from the vocabulary of business terms. XpciVersion identifies the version of the transaction language. The implied version is the most recent version. The tag XpciVersion identifies the version of the business vocabulary.

The client uses CustomerContext to synchronize request/response pairs. The client establishes CustomerContext, which can contain any information you want, as long as it is valid XML; it is echoed back to the server.

The success or failure of a transaction is detailed in ResponseStatusCode and ResponseStatusDescription. The UPS XPCI server only supports synchronous interchanges at this time. XPCI compliant transactions always contain a request and a response.

Interchange Interface Specification

Each UPS OnLine Tools interchange contains common elements. These elements are used to frame each request, response, and error.

The UPS OnLine Tools interchange operates within an HTTP 1.0 framework. An XML request is sent to an interface via the HTTP POST method. An XML response is returned. The interchange is synchronous (that is, the UPS OnLine Tools client thread waits for the UPS OnLine Tools server to respond).

The following XPCI tables represent the interchange interface elements involved in the UPS OnLine Tools transactions.

Table 1:   XPCI Interchange INPUT Element Definitions

Element (Xpath)	Required	Type	Length	Description / Values
Request/ TransactionReference/ CustomerContext	No	ANY	0..512	Customer provided data. May be XML. This data is echoed back to the customer.
Request/ TransactionReference/ XpciVersion	No	Alphanumeric	1..50	Identifies the version of the message. Currently the only supported version is 1.0001
Request/RequestAction	Yes	Alphanumeic	1..15	Identifies the function to be invoked. Each Tool has a unique ID name.
Request/RequestOption	No	Alphanumeic	1..15	Identifies the optional processing to be performed. Each service defines the possible options.

On a successful exchange with the Tools, only the first four elements below will be returned as output. If an error occurs, additional fields will be populated.

Table 2:   XPCI Interchange OUTPUT Element Definitions

Element (Xpath)	Required	Type	Length	Description / Values
Response/ TransactionReference/ CustomerContext	No	Any	0..512	Customer provided data. May be XML. If this data is present in the request, it is echoed back to the customer.
Response/ TransactionReference/ XpciVersion	No	Alphanumeric	1..50	Identifies the version of the message. Currently the only supported version is 1.0001.
Response/ ResponseStatusCode	Yes	Numeric	1	Identifies the success or failure of the interchange. 1 = Successful interchange 0 = Failed interchange
Response/ ResponseStatusDescription	No	Alphanumeric	1..15	Describes the Response Status Code.
Response/Error	No	Container	N/A	If an error is encountered during the interchange, the Response contains an error. If the error is present, then the ErrorSeverity and ErrorCode are required.
Response/Error/ ErrorSeverity	Yes	Alphanumeric	1..15	Describes the severity of the error. TransientError - Customer's data has not been processed due to system unavailability. The customer has to wait and try again. HardError - The error was encountered processing the customer's data and that the data needs correction. Warning - The customer's data was successfully processed; however, there were warnings encountered during processing.

General Programming Information — **Interchange Interface Specification**

Table 2:   XPCI Interchange OUTPUT Element Definitions

Response/Error/ErrorCode	Yes	Numeric	1..15	A numeric value that describes the error. Each tool defines a range of error codes. Refer to Error Conditions, in the appropriate chapter, for a complete list of interchange errors.
Response/Error/ErrorDescription	No	Alphanumeric	1..50	Describes the error code.
Response/Error/MinimumRetrySeconds	No	Numeric	1..5	Number of seconds to wait until retry. This field is populated on special conditions of the Transient Error only, as defined by the service. A number between 1 and 86400 (24 hours)
Response/Error/ErrorLocation	No	Container	N/A	Identifies the element in error.
Response/Error/ErrorLocation/ErrorLocationElementName	No	Alphanumeric	1..512	The XPATH name of the element in error. This is a valid XPATH pointing to an element in the request document.
Response/Error/ErrorLocation/ErrorLocationAttributeName	No	Alphanumeric	1..50	The name of the attribute in error. This is the name of the attribute contained by the Error Location Element.
Response/Error/ErrorLocation/ErrorDigest	No	Alphanumeric	Bound by the size of the Request data.	The contents of the element in error.

Data Type Codes

UPS OnLine Tools supports the XML 1.0 specification, as recommended by the World Wide Web consortium (http://wwww3org/TR/REC-xml). All message data must conform to this specification.

All message data is text (a sequence of characters), which may represent markup or character data. A character is an atomic unit of text, as specified by ISO/IEC 10646[*]. Legal characters are tab, carriage return, line feed, and the legal graphic characters of Unicode and ISO/IEC 10646. The use of compatibility characters, as defined in The Unicode Standard, Version 2.02[†], is discouraged.

Supported Character Set

UPS OnLine Tools supports the UTF-8 and ISO–8859-1 character sets.

Dates, Times, and Numbers

Reducing all data to character data simplifies many aspects of message parsing and transport. However, this also creates problems when more complex data is needed. Since all data is text, dates, times, and numbers require agreement, with regard to their representation. UPS OnLine Tools use the following representation of dates, times and numbers.

Table 3:   Representation of Dates, Times, and Numbers

Data Type	Description
Date	Two date formats are supported: YYYY-MM-DD and YYYYMMDD
Time	Two time formats are supported: HHMMSS and HH:MM:SS, where HH is the hour field and uses a 24-hour clock (military time). All time is based on LOCAL time zone.
Number	Decimal numbers are represented with 2 decimal positions. Integers are represented without any decimal points.
Telephone Number	Only digits 0-9 are allowed. Length must be between 10 and 14 digits.

---

[*]   ISO (International Organization for Standardization). ISO/IEC 10646-1993 (E). Information technology -- Universal Multiple-Octet Coded Character Set (UCS) -- Part 1: Architecture and Basic Multilingual Plane. [Geneva]: International Organization for Standardization, 1993 (plus amendments AM 1 through AM 7).

[†]   The Unicode Consortium. The Unicode Standard, Version 2.0. Reading, Mass.: Addison-Wesley Developers Press, 1996.

General Programming Information   Data Type Codes

HTTP Request and Response

The following text and examples illustrate HTTP requests and responses. The examples illustrate the HTTP POST command and all necessary headers. The response shows the response headers and response data. The bold LF in the XML is added for formatting and does not exist in the actual data.

XML Request Messages over HTTP

Every HTTP request consists of four parts:

- request line
- header fields
- empty line
- message body

Sending Requests

To send a request to a tool, an application writes a stream of data to the tool via a TCP/IP socket or URL connection. The data stream must be in the form of an HTTP request message. An application can create a formatted request message in a buffer, and then write the contents of the buffer to the tool. The exact syntax used to write the buffer to the tool varies, depending on the programming language and the communication API is being used.

Request Line

The request line comprises the following three elements:

- Method
- Request-URL
- HTTP-version, and ending with carriage-return-line-feed (CRLF) string

Table 4:   Request Line Elements

Element	Description
Method	Indicates the method for sending data to the resource identified by the Request-URL. Method is case-sensitive. Though other values are possible, the UPS OnLine Tools require this be set to POST.
Request-URL	The location of the tool to which the message data should be sent.
HTTP-version	The HTTP version of the message.

Header Fields

Header fields provide general information about a request. To understand what kind of data is being received, every request containing a message body should include a Content-type header. The Content-type header field indicates the media type (text, html, image, etc.) of the message body sent to the recipient. For the POST method, HTTP requires that the Content-Length header be supplied. The Content-Length provided in the header is the length, in bytes, of the message body.

Empty Line

After the necessary headers are added to the request, an empty line must be added to indicate the end of the header fields and the start of the message body, if there is one.

Message Body

The message body contains the information to be processed by a tool. The message must be XPCI-compliant.

HTTP Request Example

```
Request:  POST /toolname/1.0

Content-Type: application/xml

Content-Length: 273

<?xml version="1.0" encoding="UTF-8"?>LF...
```

Within the request line, each element is separated by a blank space (SP). No CRs or LFs are allowed, except in the final CRLF sequence. The structure of the request line is shown below, followed by an example.

```
Request Line = Method SP Request-URL SP HTTP-version CRLF
```

```
Example: POST /register HTTP/1.0
```

XML Response Messages over HTTP

Every response consists of four parts: status line, header fields, empty line, and message body.

Reading Responses

To read a response from a tool, an application reads the response in XML format via a TCP/IP socket or URL connection. The application parses the data out of the response data stream. The exact syntax of the response complies with the XPCI specification.

Status Line

The status line comprises three elements:

- HTTP-version
- Status-Code
- Reason-Phrase, and ending with carriage return-line feed (CRLF) string

Table 5:   Status Line Elements

Element	Description
HTTP-version	The HTTP version of the message.
Status-Code	A 3-digit integer result code of the attempt to understand and satisfy the request.
Reason-Phrase	A short textual description of Status-Code.

HTTP Response Example

```
HTTP/1.1 200 OK

Server: Netscape-Enterprise/3.6

Date: Fri, 06 Aug 1999 LF

21:04:44 GMT

Content-type: application/xml

<?xml version="1.0" encoding="UTF-8"?>LF
```

Within the status line, each element is separated by blank spaces (SP). No CRs or LFs are allowed, except in the final CRLF sequence. The structure of the status line is shown below, followed by an example.

```
Status Line = HTTP-version SP Status-Code SP Reason-Phrase CRLF
```

Example: HTTP/1.0 200 OK

Returns on the Web Programming Information
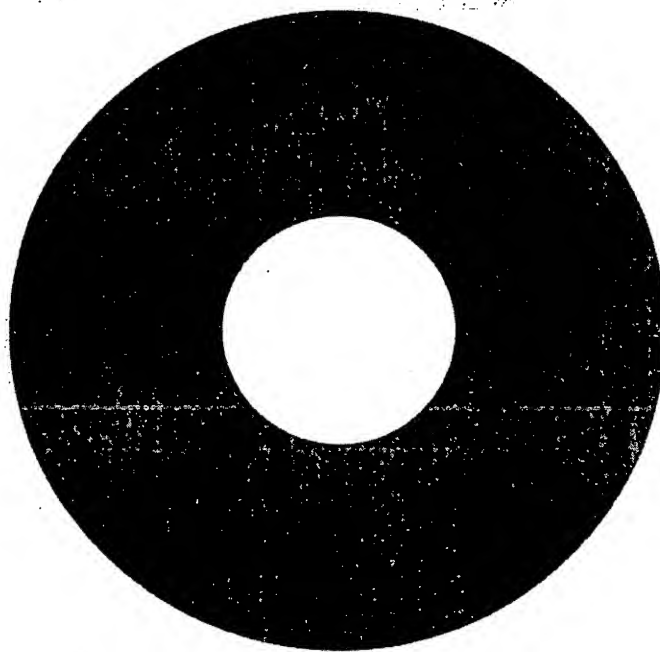
Returns on the Web

UPS Returns on the Web

Introduction

Improve your online customer service with UPS Returns On The Web, available in the latest XML technology. This powerful UPS OnLine Tool provides your customers with the option to return a product using the same technology to which they submitted the purchase.

You can know track a return package while making your customers return experience more pleasant.

With UPS Returns On The Web, You Can:

- Provide your customers with return options.
- Improve customer service by giving your inventory management system consistent, up-to-date shipping information.

Your Customers Can:

- Receive return delivery options when returning a package.
- Receive a prepaid return label.
- Arrange for a package pickup time.

For more information on UPS OnLine Tools, including UPS Returns On The Web, please visit http://www.ec.ups.com.

Tool Overview

The "Returns on the Web" service offering is initiated by a Merchant request for an UPS Return Service. After the request is received and processed, the response includes shipping data and an electronic label to the Merchant. The Merchant can then integrate carrier data with order information and pass the label to their customer via e-mail, or the customer's browser. The value provided is a result of the integration of a Merchant's technology with UPS technology. Each solution will be slightly different according to each Merchant's returns business rules.

Returns on the Web service originates from the End Consumer requesting return service using the phone or the Merchant's Web site. The return request will generate a label to facilitate returning the packages to the correct vendor. In the event the Consumer or Merchant does not receive the label or misplaces the shipment label, the Returns on the Web Label Recovery tool contains the ability to recover the label up to 30 days from the request using either the Tracking Number or the Reference Number and Shipper Number. Labels can be generated in real-time and be instantly ready for printing from browser or be sent via e-mail.

This release of the tool will not support Hazardous Materials and WorldWide Returns. The March release of Returns On The Web only facilitates returns for US 50.

Connection Addresses

Key Concepts

Merchant - Often referred to as Web Merchant or Shipper. However, it should be noted the use of this application is not limited to Web Merchants, any customer can integrate Returns On The Web. The Merchant is a UPS customer who wishes to facilitate returns using the Internet.

End Consumer - Also referred to as customer. The End consumer is the Merchant's customer who initiates the request for a return.

Vendor - Often referred to as the destination. The Vendor is the entity who receives the returned goods.

Use Cases

The following use cases describe possible business applications for the UPS OnLine Returns on the Web Tool. Contact with UPS with any further questions you may have regarding your intended application for the tool.

< INSERT USE CASES>

Returns on the Web Processes

The process for Returns on the Web is designed to support a Web Merchant who has a need to reciprocate a web sale transaction with a web return transaction. This process facilitates the return by enabling the presentation of a return label in electronic format at Internet speed. The usual delay associated with getting a " pre-paid" shipping label into the end consumer's hands is overcome by the ability to present, and therefore print, that label from the end consumer's browser, the very same vehicle from which the original transaction was likely conceived. The service enables Merchants to provide their customers with the Print Return Label (PRL), Return Notification and Pickup Notification online return shipping options.

The Return Notification is a e-mail notification of a return at the package level. The return notification allows the user to supply the relevant End Consumer, Vendor and Shipper information, where Shipper is required in the event of e-mail failure. Whatever e-mail addresses are present the tool can provide the recipient with return notification e-mail. This notification allows the End Consumer, the Merchant, and the Vendor, to track the package as it is returning to them. The e-mail will consist of the manufacturing companies address information, the customer's address information, UPS contact information, a Tracking Number, a tracking URL with and without a Tracking Number, a Shipment Reference Number (RMA), the Service Level and the Shipment Weight.

The Pickup Notification option is available at the shipment level. Pickup Notification will not allow a label image or URL to be passed in the XML document. Pickup Notification will send confirmation e-mail to the originator's e-mail address, i.e. the End Consumer's e-mail address. The confirmation e-mail will indicate the status of the 1 Attempt or 3 Attempt request, expected first attempt pickup ('Next Business Day'), Tracking Number and the Tracking URL with the Tracking Number. An UPS compliant shipping label is then issued to Merchant for distribution to the End Consumer. The End Consumer will package, label, and submit parcels to UPS.

The basic process for all e-mail notification is as follows:
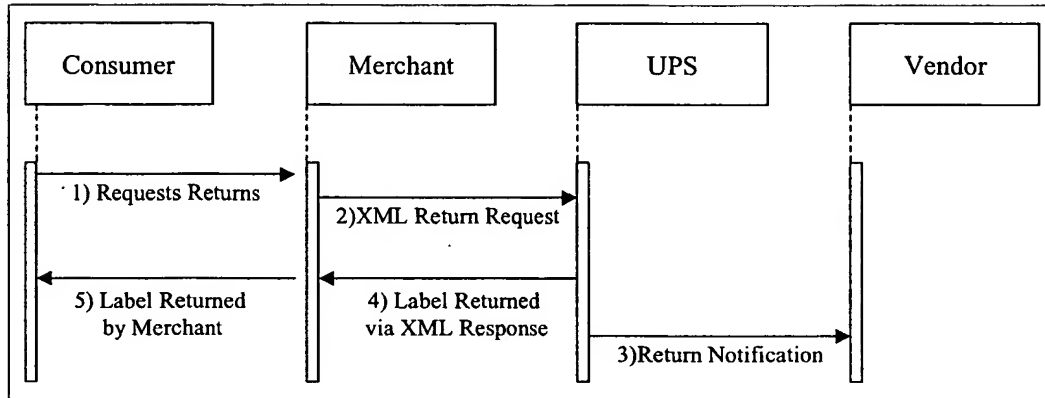
Figure 1:   Print the Return Label by sending the XML To the Merchant
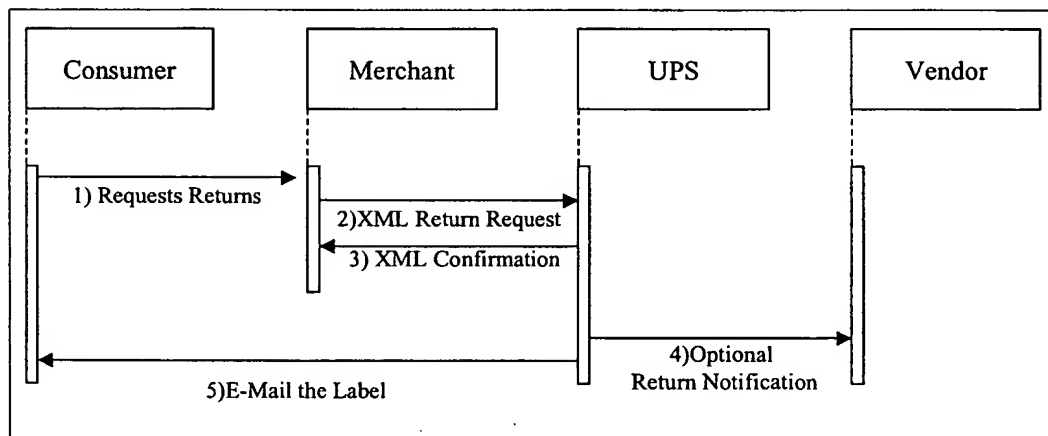
Figure 2:   Print the Return Label by sending the Label to the Consumer via E-mail
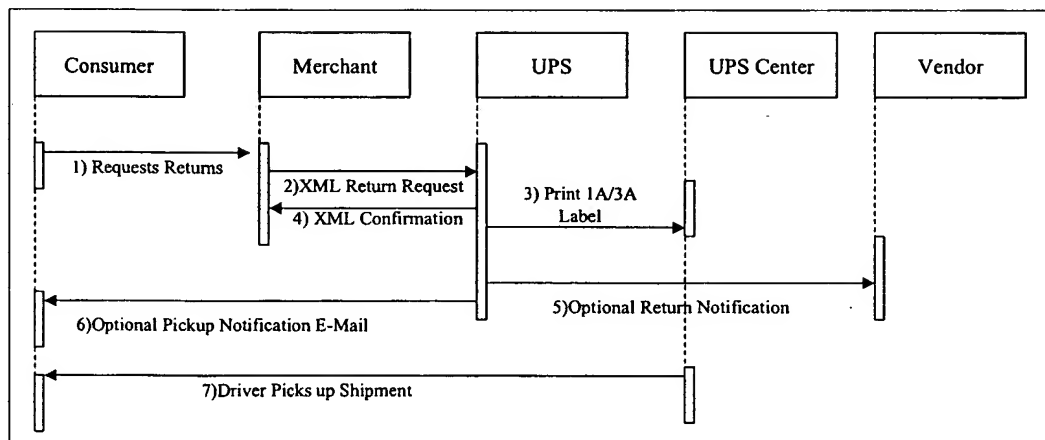
Figure 3:   Pickup Notification

For documentation purposes the elements that do not require population are not provided in this document.

Return Request DTD

When Returns On The Web information is needed for a particular shipment, a Return Request must be created and sent to the UPS OnLine Tools server for processing. The request must include several pieces of information and may include additional shipment information, depending upon the type of package being returned. For a Return of a document, the request must include:

- Request Action
- Ship From Information
- Ship To Information
- Shipper Information
- Delivery Service Type
- Payment Information
- Package Type
- Return Service Type
- Merchandise Description

These data elements must be sent to the UPS OnLine Tools server in the required XML format for Returns On The Web services to be rendered.

Return Response DTD

Based upon the user supplied inputs into the Return Request document the user will receive a document with a summary of the supplied information as well as, a breakdown of the return charges, billing weight, a Shipment Identification Number, a Package Tracking Number, and a label.

Returns on the Web Guidelines

Table Notes

The following input and output tables are for reference only and may include data elements that are contained in the DTD, but are not relevant to the use of this Tool. Those elements that are required or are optional for this tool are not shaded. Those elements that are " Not Relevant For This Tool" or are " Not Populated for This Release" are shaded in gray.

Description/Value Definitions

- Can Be Used—the data element is optional and can be used in accordance with the terms specified in the Validation Rules.
- Defaults To—identifies the default values for data elements that are not populated.
- Format—identifies specific formats that will be recognized for a specific data element. Usually used for data elements which identify Times (HHMM) or Dates (YYYYMMDD).
- Not Populated for This Release—the referenced data element is not used for this release of this Tool, but may be used in a future release. The data element will not be processed, however, no error will be returned.
- Not Relevant for This Tool—the referenced data element is not pertinent to this tool. However, if passed, the data element will not be processed and an error message will not be returned.

- Required For—the referenced data element will be processed if the conditions identified are met. If the conditions are not met, the element may be ignored or an error returned (if stated rules are violated).
- Valid Values—identifies the specific values or parameters that will be recognized for the referenced data element.

Return Request Input

DTD Definition

< !ELEMENT ReturnRequest (Request, LabelSpecification? , Shipment)>

Table 1: Return Request Input

Element (Xpath)	Required/ Cardinality	Type	Length	Description/Values
ReturnRequest/Request	Yes/ One		Container	
ReturnRequest/Request/ RequestAction	Yes/ One	#PCDATA	13	Indicates the action to be taken by the XML service. Must be 'Return'.
ReturnRequest/Request/ TransactionReference	No/ Zero or One		Container	TransactionReference identifies transactions between client and server.
ReturnRequest/Request/ TransactionReference/ CustomerContext	No/ Zero or One	#ANY	1..512	The client uses CustomerContext to synchronize request/response pairs. The client establishes CustomerContext, which can contain any information you want, as along as it is valid XML; it is echoed back by the server.
ReturnRequest/Request/ TransactionReference/ XpciVersion	No/ Zero or One	#PCDATA	4	Message version. Defaults to '1.0002'.
ReturnRequest/Request/ TestIndicator	No/ Zero or One	EMPTY	0	If the indicator is present then the document is a test return shipment. Meaning, nothing the user inputs will be recorded for Returns.

Returns on the Web Programming Information   Return Request Input

Table 1: Return Request Input

ReturnRequest/ LabelSpecification	No/ Zero or One		Container	Container used to define the properties required by the user to print and/or display the label. Should the user choose not to populate the fields, the LabelPrintMethod/Code will default to gif, HTTPUserAgent will default to Mozilla/4.5 and LabelImageFormat/Code will default to gif.
ReturnRequest/ LabelSpecification/ LabelPrintMethod	Yes/ One		Container	The device used to print a label image.
ReturnRequest/ LabelSpecification/ LabelPrintMethod/Code	Yes/ One	#PCDATA	3	Label print method code that the labels are to be generated for EPL2 formatted labels use 'EPL' and for image formats use 'GIF'. Valid values are 'GIF' and 'EPL'.
ReturnRequest/ LabelSpecification/ HTTPUserAgent	Cond/ Zero or One	#PCDATA	1..64	Browser HTTPUserAgent String. This is the preferred way of identifying GIF image type to be generated Required if ReturnRequest/ LabelSpecification/ LabelPrintMethod/Code = GIF.
ReturnRequest/ LabelSpecification/ LabelStockSize	Cond		Container	The size of the label stock used to render a label image. See also UnitOfMeasurement, Height, Width.
ReturnRequest/ LabelSpecification/ LabelStockSize/Height	Cond/ One	#PCDATA	1..3	Width of the label image. For IN, use whole inches. For EPL2 labels only. Valid values are '6' or '8'.
ReturnRequest/ LabelSpecification/ LabelStockSize/Width	Cond/ One	#PCDATA	1..3	Height of the label image. For IN, use whole inches. For EPL2 labels only. Only valid value is '4'.
ReturnRequest/Shipment/ Shipper	Yes/ One		Container	Shipper of record for a shipment.
ReturnRequest/Shipment/ Shipper/Name	Yes/ Zero or One	#PCDATA	1..35	Shipper's company name.
ReturnRequest/Shipment/ Shipper/AttentionName	No/ Zero or One	#PCDATA	1..35	Shipper's Attention Name

Returns on the Web Programming Information . Return Request Input

Table 1:   Return Request Input

ReturnRequest/Shipment/ Shipper/ TaxIdentificationNumber	No/ Zero or One	#PCDATA	1..15	Shipper's Tax Identification Number
ReturnRequest/Shipment/ Shipper/PhoneNumber	Cond/ Zero or One	Mixed: #PCDATA or Structured Phone Number element	1..10	Shipper's Phone Number 10 digits allowed. Refer to the Universal Rules table in Appendix C.
ReturnRequest/Shipment/ Shipper/PhoneNumber/ StructuredPhoneNumber	Cond/ Zero or One		Container	Required if parent element, PhoneNumber.
ReturnRequest/Shipment/ Shipper/PhoneNumber/ StructuredPhoneNumber/ PhoneDialPlanNumber	Yes/ One	#PCDATA	1..10	Dial plan number portion of the phone number. Refer to the Universal Rules table in Appendix C.
ReturnRequest/Shipment/ Shipper/PhoneNumber/ StructuredPhoneNumber/ PhoneLineNumber	Yes/ One	#PCDATA	1..10	Line number portion of the phone number. Refer to the Universal Rules table in Appendix C.
ReturnRequest/Shipment/ Shipper/PhoneNumber/ StructuredPhoneNumber/ PhoneExtension	No/ Zero or One	#PCDATA	1..4	Shipper's phone extension.
ReturnRequest/Shipment/ Shipper/ShipperNumber	Yes/ One	#PCDATA	6	Shipper's six digit alphanumeric account number. Must be associated with the Internet account used to login.
ReturnRequest/Shipment/ Shipper/Address	Yes/ One		Container	Information that specifies a physical location.
ReturnRequest/Shipment/ Shipper/Address/ AddressLine1	Yes/ One	#PCDATA	1..35	Address Line 1 of the shipper.
ReturnRequest/Shipment/ Shipper/Address/ AddressLine2	No/ Zero or One	#PCDATA	1..35	Address Line 2 of the shipper. Usually Room/Floor information.
ReturnRequest/Shipment/ Shipper/Address/AddressLine3	No/ Zero or One	#PCDATA	1..35	Address Line 3 of the shipper. Usually department information.
ReturnRequest/Shipment/ Shipper/Address/City	Yes/ One	#PCDATA	1..30	Shipper's city.

Table 1:   Return Request Input

ReturnRequest/Shipment/ Shipper/Address/ StateProvinceCode	Yes/ One	#PCDATA	2	Shipper's state code. Must be a valid US State
ReturnRequest/Shipment/ Shipper/Address/PostalCode	Yes/ One	#PCDATA	5,9	Shipper's postal code. 5 or 9 digits are required.
ReturnRequest/Shipment/ Shipper/Address/CountryCode	Yes/ One	#PCDATA	2	Shipper's country code. Valid value must be: 'US'
ReturnRequest/Shipment/ ShipTo	Yes/ One		Container	Address and contact information describing the location where a return is to be delivered.
ReturnRequest/Shipment/ ShipTo/CompanyName	Yes/ One	#PCDATA	1..35	Consignee's company name.
ReturnRequest/Shipment/ ShipTo/AttentionName	Yes/ One	#PCDATA	1..35	Contact name at the consignee's location.
ReturnRequest/Shipment/ ShipTo/PhoneNumber	No/ Zero or One	Mixed: #PCDATA or Structured Phone Number element	1..10	Consignee's phone number. 10 digits are allowed Refer to the Universal Rules table in Appendix C.
ReturnRequest/Shipment/ ShipTo/PhoneNumber/ StructuredPhoneNumber	Cond/ Zero to One		Container	Required if parent element, PhoneNumber, is required and a phone number is not provide at the parent node.
ReturnRequest/Shipment/ ShipTo/PhoneNumber/ StructuredPhoneNumber/ PhoneDialPlanNumber	Yes/ One	#PCDATA	1..10	Dial plan number portion of the phone number. Refer to the Universal Rules table in Appendix C.
ReturnRequest/ Shipment/ ShipTo/PhoneNumber/ StructuredPhoneNumber/ PhoneLineNumber	Yes/ One	#PCDATA	1..10	Line number portion of the phone number. Refer to the Universal Rules table in Appendix C.
ReturnRequest/Shipment/ ShipTo/PhoneNumber/ StructuredPhoneNumber/ PhoneExtension	No/ Zero or One	#PCDATA	1..4	ShipTo's Phone extension.
ReturnRequest/Shipment/ ShipTo/Address	Yes/ One		Container	Information that specifies a physical location.
ReturnRequest/Shipment/ ShipTo/Address/AddressLine1	Yes/ One	#PCDATA	1..35	Address Line 1 of the consignee.

Table 1:   Return Request Input

ReturnRequest/Shipment/ ShipTo/Address/AddressLine2	No/ Zero or One	#PCDATA	1..35	Address Line 2 of the consignee. Usually Room/Floor information.
ReturnRequest/Shipment/ ShipTo/Address/AddressLine3	No/ Zero or One	#PCDATA	1..35	Address Line 3 of the consignee. Usually department information.
ReturnRequest/Shipment/ ShipTo/Address/City	Yes/ One	#PCDATA	1..30	Consignee's city.
ReturnRequest/Shipment/ ShipTo/Address/ StateProvinceCode	Yes/ One	#PCDATA	2	Must be a valid US State
ReturnRequest/Shipment/ ShipTo/Address/PostalCode	Yes/ One	#PCDATA	5,9	Consignee's postal code. 5 or 9 digits are required.
ReturnRequest/Shipment/ ShipTo/Address/CountryCode	Yes/ One	#PCDATA	2	Consignee's country code. Valid value must be: 'US'
ReturnRequest/Shipment/ ShipFrom	Yes/ One		Container	Address and contact information describing the location where a shipment is to be picked up.
ReturnRequest/Shipment/ ShipFrom/CompanyName	Yes/ Zero or One	#PCDATA	1..35	Consumer's company name.
ReturnRequest/Shipment/ ShipFrom/AttentionName	No/ Zero or One	#PCDATA	1..35	Contact name.
ReturnRequest/Shipment/ ShipFrom/PhoneNumber	Cond/ Zero or One	Mixed: #PCDATA or Structured Phone Number element	1..10	Consumer's phone number. 10 digits are allowed Refer to the Universal Rules table in Appendix C.
ReturnRequest/Shipment/ ShipFrom/PhoneNumber/ StructuredPhoneNumber	Cond/ Zero to One		Container	Required if parent element, PhoneNumber, is required and a phone number is not provide at the parent node.
ReturnRequest/Shipment/ ShipFrom/PhoneNumber/ StructuredPhoneNumber/ PhoneDialPlanNumber	Yes/ One	#PCDATA	1..10	Dial plan number portion of the phone number. Refer to the Universal Rules table in Appendix C.
ReturnRequest/Shipment/ ShipFrom/PhoneNumber/ StructuredPhoneNumber/ PhoneLineNumber	Yes/ One	#PCDATA	1..10	Line number portion of the phone number. Refer to the Universal Rules table in Appendix C.

Table 1:   Return Request Input

ReturnRequest/Shipment/ ShipFrom/PhoneNumber/ StructuredPhoneNumber/ PhoneExtension	No/ Zero or One	#PCDATA	1..4	ShipFrom's Phone extension.
ReturnRequest/Shipment/ ShipFrom/Address	Yes/ One		Container	Information that specifies a physical location.
ReturnRequest/Shipment/ ShipFrom/Address/ AddressLine1	Yes/ One	#PCDATA	1..35	Address Line 1 of the pickup location.
ReturnRequest/Shipment/ ShipFrom/Address/ AddressLine2	No/ Zero or One	#PCDATA	1..35	Address Line 2 of the pickup location. Usually Room/Floor information.
ReturnRequest/Shipment/ ShipFrom/Address/ AddressLine3	No/ Zero or One	#PCDATA	1..35	Address Line 3 of the pickup location. Usually department information.
ReturnRequest/Shipment/ ShipFrom/Address/City	Yes/ One	#PCDATA	1..30	Pickup location's city.
ReturnRequest/Shipment/ ShipFrom/Address/ StateProvinceCode	Yes/ One	#PCDATA	2	Pickup location's state code. Must be a valid US State.
ReturnRequest/Shipment/ ShipFrom/Address/ PostalCode	Yes/ One	#PCDATA	5,9	Pickup location's postal code. 5 or 9 digits are required.
ReturnRequest/Shipment/ ShipFrom/Address/ CountryCode	Yes/ One	#PCDATA	2	Pickup location's country code. Valid value must be: 'US'
ReturnRequest/Shipment/ PaymentInformation	Yes/ One		Container	Requires either UPS Account number.
ReturnRequest/Shipment/ PaymentInformation/Prepaid	Yes/ One		Container	Return charges must be prepaid.
ReturnRequest/Shipment/ PaymentInformation/Prepaid/ BillShipper	Yes/ One		Container	Return charges must be billed to the shipper.
ReturnRequest/Shipment/ PaymentInformation/Prepaid/ BillShipper/AccountNumber	Yes/ One	#PCDATA	6	UPS Account number. Valid lengths are 6.
ReturnRequest/Shipment/ Service	Yes/ One		Container	The UPS service selected for a return.

Table 1:   Return Request Input

ReturnRequest/Shipment/ Package/Dimensions/Length	Yes/ One	#PCDATA	9	Package length. Refer to the Universal Rules table in Appendix C. Required if width and height are set. Valid values are 0 to 108 IN
ReturnRequest/Shipment/ Package/Dimensions/Width	Yes/ One	#PCDATA	9	Package width. Refer to the Universal Rules table in Appendix C.
ReturnRequest/Shipment/ Package/Dimensions/Height	Yes/ One	#PCDATA	9	Package height. Refer to the Universal Rules table in Appendix C. Valid values are 0 to 330 IN.
ReturnRequest/Shipment/ Package/PackageWeight	Cond/ One		Container	Required when the package type is not UPS Letter.
ReturnRequest/Shipment/ Package/PackageWeight/ UnitOfMeasurement/Code	Yes/ One	#PCDATA	3	Package weight unit of measurement code. Codes are: 'LBS' = Pounds, '01' = English Unit of Measurements
ReturnRequest/Shipment/ Package/PackageWeight/ Weight	Yes/ One	#PCDATA	8	Packages weight. Default to 0 for package type of UPS letters.
ReturnRequest/Shipment/ Package/OversizePackage	No/ Zero or One	#PCDATA	1	Oversize indicator Values are '0' = not oversized, '1' = OS1, '2' = OS2. Defaults to '0'. Refer to the Universal Rules table in Appendix C.
ReturnRequest/Shipment/ Package/ReferenceNumber	No/ Zero to two		Container	Package-level reference numbers.
ReturnRequest/Shipment/ Package/ReferenceNumber/ Code	No/ Zero or One	#PCDATA	2	Reflects what will go on the label. Refer to Reference # Code Table.
ReturnRequest/Shipment/ Package/ReferenceNumber/ Value	Yes/ One	#PCDATA	1..35	Customer supplied reference number. Reference numbers are defined by the shipper and can contain any character string.

Returns on the Web Programming Information   Return Request Input

Table 1:   Return Request Input

ReturnRequest/Shipment/ Package/AdditionalHandling	No/ Zero or One	#EMPTY	0	The presence indicates additional handling is required, the absence indicates no additional handling is required.
ReturnRequest/Shipment/ Package/ PackageServiceOptions	No/ Zero or One		Container	Defines service options available for packages.
ReturnRequest/Shipment/ Package/ PackageServiceOptions/ InsuredValue	No/ Zero or One		Container	Monetary value of the package.
ReturnRequest/Shipment/ Package/ PackageServiceOptions/ InsuredValue/CurrencyCode	Yes/ One	#PCDATA	3	Declared value amount currency type. Valid value must be 'USD'
ReturnRequest/Shipment/ Package/ PackageServiceOptions/ InsuredValue/MonetaryValue	Yes/ One	#PCDATA	1..19	Insured value amount. Will accept insured value of $999.00 USD or less.
ReturnRequest/Shipment/ Package/ PackageServiceOptions/ Notification	No/ Zero to One		Container	Container for the Return Notification accessorial. One ReturnNotification per shipment.
ReturnRequest/Shipment/ Package/ PackageServiceOptions/ Notification/NotificationCode	Yes/ One	#PCDATA	1	The type of shipment notification requested. Valid Value: 3 = Return Notification
ReturnRequest/Shipment/ Package/ PackageServiceOptions/ Notification/EMailMessage	Yes/ One		Container	Container for the e-mail Message.
ReturnRequest/Shipment/ Package/ PackageServiceOptions/ Notification/EMailMessage/ EMailAddress	Yes/ One or two	#PCDATA	1..50	The destination eMail address of the return notification eMail. Refer to the Universal Rules table in Appendix C.

Table 1:   Return Request Input

ReturnRequest/Shipment/ Package/ PackageServiceOptions/ Notification/EMailMessage/ UndeliverableEMailAddress	No/ Zero or One	#PCDATA	1..50	The e-mail address where an undeliverable eMail message is sent if the Return Notification email is undeliverable. Refer to the Universal Rules table in Appendix C. Defaults to FromEMailAddress.
ReturnRequest/Shipment/ Package/ PackageServiceOptions/ Notification/EMailMessage/ FromEMailAddress	Yes/ One	#PCDATA	1..50	The e-mail address specifies the From E-mail address. Refer to the Universal Rules table in Appendix C.
ReturnRequest/Shipment/ Package/ PackageServiceOptions/ Notification/EMailMessage/ FromName	No/ Zero or One	#PCDATA	1..35	The name the return notification will appear to be from. Defaults to the Shipper Name
ReturnRequest/Shipment/ Package/ PackageServiceOptions/ Notification/EMailMessage/ Memo	No/ Zero or One	#PCDATA	1..150	User defined text that will be included in the eMail.
ReturnRequest/Shipment/ Package/ PackageServiceOptions/ Notification/EMailMessage/ Subject	No/ Zero or One	#PCDATA	1..75	The eMail's subject. Defaults to the 'Return Notification' plus the shipment ID. Defaults to text provided by UPS
ReturnRequest/Shipment/ Package/ PackageServiceOptions/ LabelDelivery	No/ Zero or One		Container	Container for the Label Delivery accessorial. One Label Delivery per shipment
ReturnRequest/Shipment/ Package/ PackageServiceOptions/ LabelDelivery/EMailMessage	Yes/ One		Container	Container for the eMail message.
ReturnRequest/Shipment/ Package/ PackageServiceOptions/ LabelDelivery/EMailMessage/ EMailAddress	Yes/ One	#PCDATA	1..50	The destination eMail address for the Label Delivery. Refer to the Universal Rules table in Appendix C.

Table 1: Return Request Input

ReturnRequest/Shipment/ Package/ PackageServiceOptions/ LabelDelivery/EMailMessage/ UndeliverableEMailAddress	No/ Zero or One	#PCDATA	1..50	The address where an undeliverable eMail message is sent if the Label Delivery email is undeliverable. Refer to the Universal Rules table in Appendix C. Defaults to FromEMailAddress.
ReturnRequest/Shipment/ Package/ PackageServiceOptions/ LabelDelivery/ EMailMessage/ FromEMailAddress	Yes/ One	#PCDATA	1..50	The e-mail address specifies the From E-mail address. Refer to the Universal Rules table in Appendix C.
ReturnRequest/Shipment/ Package/ PackageServiceOptions/ LabelDelivery/EMailMessage/ FromName	No/ Zero or One	#PCDATA	1..35	The name notification will appear to be from. Defaults to the Shipper Name
ReturnRequest/Shipment/ Package/ PackageServiceOptions/ LabelDelivery/EMailMessage/ Memo	No/ Zero or One	#PCDATA	1..150	User defined text that will be included in the eMail.
ReturnRequest/Shipment/ Package/ PackageServiceOptions/ LabelDelivery/EMailMessage/ Subject	No/ Zero or One	#PCDATA	1..75	The eMail's subject. Defaults to the 'Label Delivery Notification' plus the shipment ID. Defaults to text provided by UPS
ReturnRequest/Shipment/ ShipmentServiceOptions	No/ Zero or One		Container	Optional UPS services related to a shipment.
ReturnRequest/Shipment/ ShipmentServiceOptions/ Notification	No/ Zero to one		Container	Container for the Pickup Notification accessorial. One Pickup per shipment
ReturnRequest/Shipment/ ShipmentServiceOptions/ Notification/ NotificationCode/	Yes/ One	#PCDATA	1	The type of shipment notification requested. Valid Value: 2 = Pickup Notification
ReturnRequest/Shipment/ ShipmentServiceOptions/ Notification/EMailMessage	Yes/ One		Container	Container for the eMail message.

Returns on the Web Programming Information   Return Request Input

Table 1:   Return Request Input

ReturnRequest/Shipment/ ShipmentServiceOptions/ Notification/EMailMessage/ EMailAddress	Yes/ One	#PCDATA	1..50	The destination eMail address for the eMail with the Pickup Notification. Refer to the Universal Rules table in Appendix C.
ReturnRequest/Shipment/ ShipmentServiceOptions/ Notification/EMailMessage/ FromEMailAddress	Yes/ One	#PCDATA	1..50	The e-mail address specifies the From E-mail address. Refer to the Universal Rules table in Appendix C.
ReturnRequest/Shipment/ ShipmentServiceOptions/ Notification/EMailMessage/ UndeliverableEMailAddress	No/ One	#PCDATA	1..50	The address where an undeliverable eMail message is sent if the eMail with the notification is undeliverable. Defaults to the FromEMailAddress Refer to the Universal Rules table in Appendix C.
ReturnRequest/Shipment/ ShipmentServiceOptions/ Notification/EMailMessage/ FromName	No/ Zero or One	#PCDATA	1..35	The name the email will appear to be from. Defaults to the Shipper Name Defaults to the Shipper's Company Name.
ReturnRequest/Shipment/ ShipmentServiceOptions/ Notification/EMailMessage/ Memo	No/ Zero or One	#PCDATA	1..150	User defined text that will be included in the eMail.
ReturnRequest/Shipment/ ShipmentServiceOptions/ Notification/EMailMessage/ Subject	No/ Zero or One	#PCDATA	1..75	The eMail's subject. Defaults to the Pickup Notification plus the shipment ID. Defaults to text provided by UPS

Return Request Example

```
<?xml version = "1.0"?>
<AccessRequest>
        <AccessLicenseNumber>5B531C247568B520</AccessLicenseNumber>
        <UserId>JohnQPublic</UserId>
        <Password>p@$$w*rd</Password>
</AccessRequest>
<?xml version = "1.0"?>
<ReturnRequest>
        <Request>
                <RequestAction>Return</RequestAction>
                <TransactionReference>
                        <CustomerContext/>
```

```
                <XpciVersion Version = "1.0002"/>
            </TransactionReference>
    </Request>
    <LabelSpecification>
            <LabelPrintMethod>
                    <Code>GIF</Code>
            </LabelPrintMethod>
            <LabelStockSize>
                    <Height>8</Height>
                    <Width>4</Width>
            </LabelStockSize>
            <HTTPUserAgent>Mozilla/4.5</HTTPUserAgent>
            <LabelImageFormat>
                    <Code>GIF</Code>
            </LabelImageFormat>
    </LabelSpecification>
    <Shipment>
            <Shipper>
                    <Name>Merchant</Name>
                    <PhoneNumber>8005551212</PhoneNumber>
                    <ShipperNumber>abc123</ShipperNumber>
                    <Address>
                            <AddressLine1>11 Merchant Lane</AddressLine1>
                            <City>Atlanta</City>
                            <StateProvinceCode>GA</StateProvinceCode>
                            <PostalCode>30188</PostalCode>
                            <CountryCode>US</CountryCode>
                    </Address>
            </Shipper>
            <ShipTo>
                    <CompanyName>Vendor</CompanyName>
                    <AttentionName>ContactName</AttentionName>
                    <PhoneNumber>8009190000</PhoneNumber>
                    <Address>
                            <AddressLine1>33 Vendor Lane</AddressLine1>
                            <City>Atlanta</City>
                            <StateProvinceCode>GA</StateProvinceCode>
                            <PostalCode>30018</PostalCode>
                            <CountryCode>US</CountryCode>
                    </Address>
            </ShipTo>
            <ShipFrom>
                    <CompanyName>Jane Doe</CompanyName>
                    <PhoneNumber>5551414</PhoneNumber>
                    <Address>
                            <AddressLine1>2001 Consumer Drive</AddressLine1>
                            <City>Atlanta</City>
                            <StateProvinceCode>GA</StateProvinceCode>
                            <PostalCode>30010</PostalCode>
                            <CountryCode>US</CountryCode>
                    </Address>
            </ShipFrom>
```

```
<ReturnService>
        <Code>4</Code>
</ReturnService>
<Service>
        <Code>01</Code>
</Service>
<PaymentInformation>
        <Prepaid>
                <BillShipper>
                        <AccountNumber>123456</AccountNumber>
                </BillShipper>
        </Prepaid>
</PaymentInformation>
<Package>
        <PackageServiceOptions>
                <Notification>
                    <NotificationCode>3</NotificationCode>
                    <EMailMessage>
                        <EMailAddress>Vendor@vendor.com</EMailAddress>
                        <Memo/>
                        <Subject>Shipment ID</Subject>
                        <FromEMailAddress>Shipper@shipper.com</FromEMailAddress>
                        <FromName>Merchant</FromName>
                        <UndeliverableEMailAddress>Shipper@shipper.com</UndeliverableEMailAddress>
                    </EMailMessage>
                </Notification>
        </PackageServiceOptions>
        <AdditionalHandling/>
        <ReferenceNumber>
                <Code>75</Code>
                <Value>0123456789</Value>
        </ReferenceNumber>
        <Description>Letter to be returned</Description>
        <PackagingType>
                <Code>01</Code>
        </PackagingType>
</Package>
</Shipment>
</ReturnRequest>
```

Return Response Output

DTD Definition

< !ELEMENT ReturnResponse (Response , ShipmentResults?)>

Table 2:   Return Response Outputs

Name (Xpath)	Required/ Cardinality	Type	Length	Description/Values
ReturnResponse/Response/ TransactionReference/ CustomerContext	No	Any	0..512	Customer provided data. May be XML. If this data is present in the request, it is echoed back to the customer.
ReturnResponse/Response/ TransactionReference/ XPCIVersion	No	Alphanumeric	1..50	Identifies the version of the message. Current version is 1.0002
ReturnResponse/Response/ ResponseStatusCode	Yes	Numberic	1	Identifies the success or failure of the interchange. 1 = Success 0 = Failure
ReturnResponse/Response/ ResponseStatusDescription	No	Alphanumeric	1..15	Describes the Response Status Code.
ReturnResponse/Response/ Error	No		Container	If an error is encountered during the interchange, the Response contains an error. If the error is present, then the ErrorSeverity and ErrorCode are required.
ReturnResponse/Response/ Error/ErrorSeverity	Yes	Alphanumeric	1..15	Describes the severity of the error.
ReturnResponse/Response/ Error/ErrorCode	Yes	Numberic	1..15	A numberic value that describes the error. Each tool defines a range of error codes. Refer to error conditions, in the appropriate chapter, for a complete list of interchange errors.
ReturnResponse/Response/ Error/ErrorDescription	No	Alphanumeric	1..50	Describes the error code.

Table 2: Return Response Outputs

ReturnResponse/Response/ Error/MinimumRetrySeconds	No	Numeric	1..5	Number of seconds to wait until retry. This field is populated on special conditions of the Transient Error only, as defined by the service. A number between 1 and 86400 (24 hours)
ReturnResponse/Response/ ErrorLocation	No		Container	Identifies the element in error.
ReturnResponse/Response/ ErrorLocation/ ErrorLocationElementName	No	Alphanumeric	1..512	The Xpath name of the element in error. This is a valid Xpath pointing to an element in the request document.
ReturnResponse/Response/ ErrorLocation/ ErrorLocationAttributeName	No	Alphanumeric	1..50	The name of the attribute in error. This is the name of the attribute contained by the Error Location element.
ReturnResponse/Response/ ErrorLocation/ErrorDigest	No	Alphanumeric	Bound by the size of the Request data.	The contents of the element in error.
ReturnResponse/ ShipmentResults	Yes/ One		Container	Processed shipment information returned from ReturnRequest.
ReturnResponse/ ShipmentResults/ ShipmentCharges	Yes/ One		Container	Changes breakdown for a shipment.
ReturnResponse/ ShipmentResults/ ShipmentCharges/ TransportationCharges	Yes/ One		Container	Base charges incurred by a return to move it from the origin address to the destination address.
ReturnResponse/ ShipmentResults/ ShipmentCharges/ TransportationCharges/ CurrencyCode	Yes/ One	#PCDATA	3	Transportation charges currency code type. The currency code used in the ReturnRequest is returned. The only value that will be returned is 'USD'

Returns on the Web Programming Information   Return Response Output

Table 2:   Return Response Outputs

ReturnResponse/ ShipmentResults/ ShipmentCharges/ TransportationCharges/ MonetaryValue	Yes/ One	#PCDATA	1..19	Transportation and surcharges value amount. Valid values are from 0 to 9999999999999999 (sixteen 9's)
ReturnResponse/ ShipmentResults/ ShipmentCharges/ ServiceOptionsCharges	Yes/ One		Container	The cost related to the service options for packages and shipments.
ReturnResponse/ ShipmentResults/ ShipmentCharges/ ServiceOptionsCharges/ CurrencyCode	Yes/ One	#PCDATA	3	Option charges currency code type. The currency code used in the ReturnRequest is returned. The only value returned is 'USD'
ReturnResponse/ ShipmentResults/ ShipmentCharges/ ServiceOptionsCharges/ MonetaryValue	Yes/ One	#PCDATA	1..19	Option charges value amount. Valid values are from 0 to 9999999999999999 (sixteen 9s)
ReturnResponse/ ShipmentResults/ ShipmentCharges/ TotalCharges	Yes/ One		Container	Total charges for a return. It includes transportation cost as well as service option costs.
ReturnResponse/ ShipmentResults/ ShipmentCharges/ TotalCharges/ CurrencyCode	Yes/ One	#PCDATA	3	Total charges currency code type. The currency code used in the ReturnRequest is returned. The only value returned is 'USD'
ReturnResponse/ ShipmentResults/ ShipmentCharges/ TotalCharges/ MonetaryValue	Yes/ One	#PCDATA	1..19	Total charges value amount. Valid values are from 0 to 9999999999999999 (sixteen 9s)
ReturnResponse/ ShipmentResults/ BillingWeight	Yes/ One		Container	The weight used for rate calculation. This varies from the actual weight when the package dimensions causes dimensional weight or oversized weight rating calculation to occur.

Table 2:   Return Response Outputs

ReturnResponse/ ShipmentResults/ BillingWeight/ UnitOfMeasurement	Yes/ One		Container	Unit of measurement for the element that contains it.
ReturnResponse/ ShipmentResults/ BillingWeight/ UnitOfMeasurement/ Code	Yes/ One	#PCDATA	2..3	Billing weight unit of measurement code. The unit of measurement used in ReturnRequest is returned. Unit of Measurement defaults to the shipper's country Valid value to be returned is 'LBS'
ReturnResponse/ ShipmentResults/ BillingWeight/ UnitOfMeasurement/ Description	No/ Zero or One	#PCDATA	3	Description of the billing weight measurement units. Value returned is: 'LBS'
ReturnResponse/ ShipmentResults/ BillingWeight/Weight	Yes/ One	#PCDATA	8	Billing weight. Higher of the actual shipment weight versus the shipment dimensional weight. Set to 0 for package type of letters or envelopes. Will not exceed 150LBS.
ReturnResponse/ ShipmentResults/ ShipmentIdentificationNumber	Yes/ One	#PCDATA	18	Returned UPS shipment ID number. Tracking Number of the first package in the shipment.
ReturnResponse/ ShipmentResults/ PackageResults	Yes/ One or more		Container	Returned Package Information.
ReturnResponse/ ShipmentResults/ PackageResults/ TrackingNumber	Yes/ One	#PCDATA	18	Package Tracking number.
ReturnResponse/ ShipmentResults/ PackageResults/ ServiceOptionsCharges	Cond/ Zero or One		Container	Shipment charges info. Shipment charges are only guaranteed to be returned for shipments whose origin country is US.

Returns on the Web Programming Information   Return Response Output

Table 2:   **Return Response Outputs**

ReturnResponse/ ShipmentResults/ PackageResults/ ServiceOptionsCharges/ CurrencyCode	Yes/ One	#PCDATA	3	Package accessorial charges currency code type. The currency code used in the ReturnRequest is returned. The only value to be returned is 'USD'
ReturnResponse/ ShipmentResults/ PackageResults/ ServiceOptionsCharges/ MonetaryValue	Yes/ One	#PCDATA	1..19	Package accessorial charges value amount. Valid values are from 0 to 9999999999999999 (sixteen 9s)
ReturnResponse/ ShipmentResults/ PackageResults/ TransportationCharges	Yes/ One		Container	Base charges incurred by a return to move it from the origin address to the destination address.
ReturnResponse/ ShipmentResults/ PackageResults/ TransportationCharges/ CurrencyCode	Yes/ One	#PCDATA	3	Transportation charges currency code type. The currency code used in the ReturnRequest is returned. The only value to be returned is 'USD'
ReturnResponse/ ShipmentResults/ PackageResults/ TransportationCharges/ MonetaryValue	Yes/ One	#PCDATA	1..19	Transportation and surcharges value amount. Valid values are from 0 to 9999999999999999 (sixteen 9s)
ReturnResponse/ ShipmentResults/ PackageResults/ LabelImage	No/ One or Zero		Container	The elements needed to render a label on a printer or in a browser. Specifies the format in which GraphicImage is represented. If LabelImageFormat is GIF, LabelImage contains GraphicImage and HTMLImage. Otherwise, it contains only GraphicImage.
ReturnResponse/ ShipmentResults/ PackageResults/ LabelImage/ LabelImageFormat	Yes/ One		Container	The format of a label image byte stream.

Table 2:   Return Response Outputs

ReturnResponse/ ShipmentResults/ PackageResults/LabelImage/ LabelImageFormat/Code	Yes/ One	#PCDATA	3	Label image code that the labels are generated. Values 'EPL' = EPL2, 'GIF' = gif images . Only 'EPL' and 'GIF' are currently supported.
ReturnResponse/ ShipmentResults/ PackageResults/LabelImage/ LabelImageFormat/ Description	No/ One	#PCDATA	1..35	Description of the label image format code.
ReturnResponse/ ShipmentResults/ PackageResults/LabelImage/ GraphicImage	Yes/ One	Base 64 Encoded	Variable Length	Base 64 encoded graphic image.
ReturnResponse/ ShipmentResults/ PackageResults/LabelImage/ HTMLImage	Cond/ Zero or One	Base 64 Encoded	Variable Length	Base 64 encoded html browser image rendering software. This is only returned for gif image formats.

Return Response Example

```
<?xml version = "1.0"?>
<ReturnResponse>
        <Response>
                <TransactionReference>
                        <CustomerContext>
                                <XpciVersion Version = "1.0002"/>
                        </CustomerContext>
                </TransactionReference>
                <ResponseStatusCode>1</ResponseStatusCode>
                <ResponseStatusDescription>Success</ResponseStatusDescription>
        </Response>
        <ShipmentResults>
                <ShipmentCharges>
                        <TransportationCharges>
                                <CurrencyCode>USD</CurrencyCode>
                                <MonetaryValue>3.50</MonetaryValue>
                        </TransportationCharges>
                        <ServiceOptionsCharges>
                                <CurrencyCode>USD</CurrencyCode>
                                <MonetaryValue>3.50</MonetaryValue>
                        </ServiceOptionsCharges>
                        <TotalCharges>
                                <CurrencyCode>USD</CurrencyCode>
                                <MonetaryValue>7.00</MonetaryValue>
                        </TotalCharges>
                </ShipmentCharges>
```

```
        <BillingWeight>
                <UnitOfMeasurement>
                        <Code>LBS</Code>
                </UnitOfMeasurement>
                <Weight>0</Weight>
        </BillingWeight>
        <ShipmentIdentificationNumber>1Z123BDS4561268F9L</ShipmentIdentificationNumber>
        <PackageResults>
                <TrackingNumber>1Z123BDS4561268F9L</TrackingNumber>
                <TransportationCharges>
                        <CurrencyCode>USD</CurrencyCode>
                        <MonetaryValue>3.50</MonetaryValue>
                </TransportationCharges>
                <ServiceOptionsCharges>
                        <CurrencyCode>USD</CurrencyCode>
                        <MonetaryValue>3.50</MonetaryValue>
                </ServiceOptionsCharges>
                <TotalPackageCharges>
                        <CurrencyCode>USD</CurrencyCode>
                        <MonetaryValue>7.00</MonetaryValue>
                </TotalPackageCharges>
        </PackageResults>
    </ShipmentResults>
</ReturnResponse>
```

Return Notification E-mail

When the Consumer requests a return, the Vendor is supplied a Return Notification. The return notification e-mail will contain the XML provided in the table below.

DTD Definition

< !ELEMENT ReturnNotificationEMail (Shipper , ShipFrom, ShipTo, MerchandiseDescription, ReferenceNumber, TrackingNumber)>

Table 3:   Return Notification

Name (Xpath)	Required/ Cardinality	Type	Length	Description/Value
ReturnNotificationEMail/ Shipper	Yes/ One		Container	Shipper of record for a shipment.
ReturnNotificationEMail/ Shipper/Name	Yes/ Zero or One	#PCDATA	1..35	Shipper's company name.
ReturnNotificationEMail/ Shipper/AttentionName	No/ Zero or One	#PCDATA	1..35	Shipper's Attention Name
ReturnNotificationEMail/ Shipper/Address	Yes/ One		Container	Information that specifies a physical location.

Table 3:   Return Notification

ReturnNotificationEMail/ Shipper/Address/ AddressLine1	Yes/ One	#PCDATA	1..35	Address Line 1 of the shipper.
ReturnNotificationEMail/ Shipper/Address/ AddressLine2	No/ Zero or One	#PCDATA	1..35	Address Line 2 of the shipper. Usually Room/Floor information.
ReturnNotificationEMail/ Shipper/Address/ AddressLine3	No/ Zero or One	#PCDATA	1..35	Address Line 3 of the shipper. Usually department information.
ReturnNotificationEMail/ Shipper/Address/City	Yes/ One	#PCDATA	1..30	Shipper's city.
ReturnNotificationEMail/ Shipper/Address/ StateProvinceCode	Yes/ One	#PCDATA	2	Shipper's state code. Must be a valid US State
ReturnNotificationEMail/ Shipper/Address/ PostalCode	Yes/ One	#PCDATA	5,9	Shipper's postal code. 5 or 9 digits are required.
ReturnNotificationEMail / Shipper/Address/ CountryCode	Yes/ One	#PCDATA	2	Shipper's country code. Valid value must be: 'US'
ReturnNotificationEMail/ ShipTo	Yes/ One		Container	Address and contact information describing the location where a return is to be delivered.
ReturnNotificationEMail/ ShipTo/CompanyName	Yes/ One	#PCDATA	1..35	Consignee's company name.
ReturnNotificationEMail/ ShipTo/AttentionName	Yes/ Zero or One	#PCDATA	1..35	Contact name at the consignee's location.
ReturnNotificationEMail/ ShipTo/Address	Yes/ One		Container	Information that specifies a physical location.
ReturnNotificationEMail/ ShipTo/Address/ AddressLine1	Yes/ One	#PCDATA	1..35	Address Line 1 of the consignee.
ReturnNotificationEMail/ ShipTo/Address/ AddressLine2	No/ Zero or One	#PCDATA	1..35	Address Line 2 of the consignee. Usually Room/ Floor information.
ReturnNotificationEMail/ ShipTo/Address/ AddressLine3	No/ Zero or One	#PCDATA	1..35	Address Line 3 of the consignee. Usually department information.

Table 3:   Return Notification

ReturnNotificationEMail/ ShipTo/Address/City	Yes One	#PCDATA	1..30	Consignee's city.
ReturnNotificationEMail/ ShipTo/Address/ StateProvinceCode	Yes One	#PCDATA	2	Must be a valid US State
ReturnNotificationEMail/ ShipTo/Address/ PostalCode	Yes One	#PCDATA	5,9	Consignee's postal code. 5 or 9 digits are required.
ReturnNotificationEMail/ ShipTo/Address/ CountryCode	Yes One	#PCDATA	2	Consignee's country code. Valid value must be: 'US'
ReturnNotificationEMail/ ShipFrom	Yes One		Container	Address and contact information describing the location where a shipment is to be picked up.
ReturnNotificationEMail/ ShipFrom/ CompanyName	Yes One	#PCDATA	1..35	Consumer's company name.
ReturnNotificationEMail/ ShipFrom/ AttentionName	No Zero or One	#PCDATA	1..35	Contact name.
ReturnNotificationEMail/ ShipFrom/Address	Yes One		Container	Information that specifies a physical location.
ReturnNotificationEMail/ ShipFrom/Address/ AddressLine1	Yes One	#PCDATA	1..35	Address Line 1 of the pickup location.
ReturnNotificationEMail/ ShipFrom/Address/ AddressLine2	No Zero or One	#PCDATA	1..35	Address Line 2 of the pickup location. Usually Room/Floor information.
ReturnNotificationEMail/ ShipFrom/Address/ AddressLine3	No Zero or One	#PCDATA	1..35	Address Line 3 of the pickup location. Usually department information.
ReturnNotificationEMail/ ShipFrom/Address/City	Yes One	#PCDATA	1..30	Pickup location's city.
ReturnNotificationEMail/ ShipFrom/Address/ StateProvinceCode	Yes One	#PCDATA	2	Pickup location's state code. Must be a valid US State.

Table 3:   Return Notification

ReturnNotificationEMail/ ShipFrom/Address/ PostalCode	Yes One	#PCDATA	5,9	Pickup location's postal code. 5 or 9 digits are required.
ReturnNotificationEMail/ ShipFrom/Address/ CountryCode	Yes One	#PCDATA	2	Pickup location's country code. Valid value must be: 'US'
ReturnNotificationEMail/ Description	Yes One	#PCDATA	1..35	Description of the goods being returned.
ReturnNotificationEMail/ ReferenceNumber	Yes Zero to Two		Container	Package-level reference numbers.
ReturnNotificationEMail/ ReferenceNumber/Code	Yes One	#PCDATA	2	Reflects what will go on the label. Refer to Reference # Code Table
ReturnNotificationEMail/ ReferenceNumber/Value	Yes One	#PCDATA	1..35	Customer supplied reference number. Reference numbers are defined by the shipper and can contain any character string.
ReturnNotificationEMail/ TrackingNumber	Yes One	#PCDATA	18	Package Tracking Number
ReturnNotificationEMail/ PackageWeight	Cond Zero or One		Container	Returned when the package type is not UPS Letter.
ReturnNotificationEMail/ PackageWeight/ UnitofMeasurement	Yes One		Container	Unit of measurement for the element that contains it.
ReturnNotificationEMail/ PackageWeight/ UnitofMeasurement/ Code	Yes One	#PCDATA	3	Package weight unit of measurement code. Valid values are: 'LBS' = Pounds '01' = English Unit of Measurements
ReturnNotificationEMail/ PackageWeight/Weight	Yes	#PCDATA	8	Packages weight.

Returns on the Web Programming Information   Return. Notification E-mail

Return Notification Example

```
<?xml version = "1.0"?>
<ReturnNotificationEMail>
        <Shipper>
                <Name>Merchant</Name>
                <Address>
                        <AddressLine1>11 Merchant Lane</AddressLine1>
                        <City>Atlanta</City>
                        <StateProvinceCode>GA</StateProvinceCode>
                        <PostalCode>30188</PostalCode>
                        <CountryCode>US</CountryCode>
                </Address>
        </Shipper>
        <ShipFrom>
                <CompanyName>Jane Doe</CompanyName>
                <Address>
                        <AddressLine1>2001 Consumer Drive</AddressLine1>
                        <City>Atlanta</City>
                        <StateProvinceCode>GA</StateProvinceCode>
                        <PostalCode>30010</PostalCode>
                        <CountryCode>US</CountryCode>
                </Address>
        </ShipFrom>
        <ShipTo>
                <CompanyName>Vendor</CompanyName>
                <AttentionName>ContactName</AttentionName>
                <Address>
                        <AddressLine1>33 Vendor Lane</AddressLine1>
                        <City>Atlanta</City>
                        <StateProvinceCode>GA</StateProvinceCode>
                        <PostalCode>30018</PostalCode>
                        <CountryCode>US</CountryCode>
                </Address>
        </ShipTo>
        <ReferenceNumber>
                <Code>75</Code>
                <Value>0123456789</Value>
        </ReferenceNumber>
        <TrackingNumber>1ZF001000997823970</TrackingNumber>
        <Description>PackageDescription</Description>
</ReturnNotificationEMail>
```

UPS Label Recovery

On occasion a customer will lose the label and call the Merchant to ask for another. The Merchant requests a duplicate label from UPS using the Returns on the Web XML Tool.

The End Consumer submits a request to the Merchant to recover a return label, the Merchant then submits an XML Request to UPS. The request must contain either the Tracking Number, or a combination of the Shipper Number and a Reference Number. UPS then returns the Tracking Number along with a recovered label.
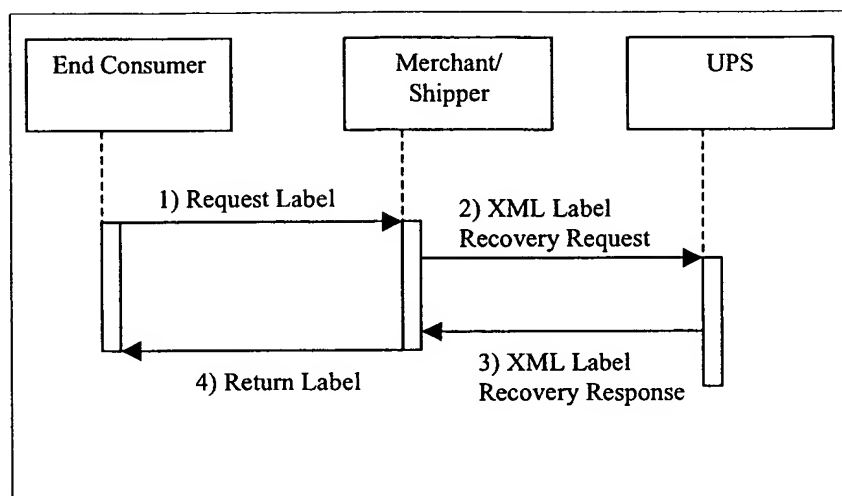
Figure 4:   Label Recovery Request/Response Process

Label Recovery Request Input

DTD Definition

< !ELEMENT LabelRecoveryRequest (Request , LabelSpecification? , (TrackingNumber | (ReferenceNumber , ShipperNumber)))>

Table 4:   Label Recovery Request Input

Name (Xpath)	Required/ Cardinality	Type	Length	Description/Value
LabelRecoveryRequest/ Request	Yes/ One		Container	
LabelRecoveryRequest/ Request/RequestAction	Yes/ One	#PCDATA	1..2	Indicates the action to be taken by the XML service. Must be 'LabelRecoveryRequest'.
LabelRecoveryRequest/ Request/ TransactionReference	No/ One		Container	TransactionReference identifies transactions between client and server.

Returns on the Web Programming Information · UPS Label Recovery

Table 4: Label Recovery Request Input

LabelRecoveryRequest/ Request/ TransactionReference/ CustomerContext	No/ Zero to One	#ANY	1..50	The client uses CustomerContext to synchronize request/response pairs. The client establishes CustomerContext, which can contain any information you want, as along as it is valid XML; it is echoed back by the server.
LabelRecoveryRequest/ Request/ TransactionReference/ XpciVersion	No/ Zero to One	#PCDATA	4	Message version. Defaults to '1.0002'.
LabelRecoveryRequest/ Request/TestIndicator	No/ Zero to One	EMPTY	0	Indicate the caller requests test behavior, if relevant, in which the processor may exhibit behavior different from production. The processor may ignore the request if no variation in behavior is available.
LabelRecoveryRequest/ LabelSpecification	No/ Zero to One		Container	Container used to define the properties required by the user to print and/or display the label. Should the user choose not to populate the fields, the LabelPrintMethod/Code will default to gif, HTTPUserAgent will default to Mozilla/4.5 and LabelImageFormat/Code will default to gif.
LabelRecoveryRequest/ LabelSpecification/ LabelPrintMethod	Yes/ One		Container	The device used to print a label image.
LabelRecoveryRequest/ LabelSpecification/ LabelPrintMethod/Code	Yes/ One	#PCDATA	3	Label print method code that the labels are to be generated for EPL2 formatted labels use 'EPL' and for image formats use 'GIF'. Valid values are 'GIF' and 'EPL'.

Table 4:   Label Recovery Request Input

LabelRecoveryRequest/ LabelSpecification/ HTTPUserAgent	Cond/ Zero or One	#PCDATA	1..64	Browser HTTPUserAgent String. This is the preferred way of identifying GIF image type to be generated Required if ReturnRequest/ LabelSpecification/ LabelPrintMethod/Code = GIF.
LabelRecoveryRequest/ LabelSpecification/ LabelStockSize	No/ Zero or One		Container	The size of the label stock used to render a label image.
LabelRecoveryRequest/ LabelSpecification/ LabelStockSize/Height	Yes/ One	#PCDATA	1..3	Width of the label image. For IN, use whole inches. For EPL2 labels only. Valid values are '6' or '8'.
LabelRecoveryRequest/ LabelSpecification/ LabelStockSize/Width	Yes/ One	#PCDATA	1..3	Height of the label image. For IN, use whole inches. For EPL2 labels only. Only valid value is '4'.
LabelRecoveryRequest/ TrackingNumber	Cond/ One	#PCDATA	18	Package Tracking number. If the TrackingNumber is not populated then the ReferenceNumber/Value and the ShipperNumber
LabelRecoveryRequest/ ReferenceNumber/Value	Cond/ One	#PCDATA	1..35	Required if TrackingNumber is not populated. Customer supplied reference number. Supports up to 2 customer supplied combinations of Reference code- value combinations.
LabelRecoveryRequest/ ShipperNumber	Cond/ One	#PCDATA	6	Required if ReferenceNumber/ Value is populated. Shipper's six digit account number. Must be six alphanumeric characters. Must be associated with the Internet account used to login.

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Label Recovery Request Example

Example 1 — Using the Tracking Number to create LabelRecoveryRequest document:

```xml
<? xml version="1.0"?>
<AccessRequest xml:lang="en-US">
  <AccessLicenseNumber>5B531C246578B520</AccessLicenseNumber>
  <UserId>jeffyork</UserId>
  <Password>Ship2A5</Password>
</AccessRequest>
<? xml version="1.0">
<LabelRecoveryRequest>
      <Request>
            <TransactionReference>
                  <XpciVersion Version = "1.0002"/>
            </TransactionReference>
            <RequestAction>LabelRecovery</RequestAction>
      </Request>
      <LabelSpecification>
            <LabelPrintMethod>
                  <Code>GIF</Code>
            </LabelPrintMethod>
            <LabelImageFormat>
                  <Code>GIF</Code>
            </LabelImageFormat>
      </LabelSpecification>
      <TrackingNumber>1ZE0E0970190020215</TrackingNumber>
</LabelRecoveryRequest>
```

Example 2 — Using Reference Number and Shipper Number to create LabelRecoveryRequest document:

```xml
<? xml version="1.0"?>
<AccessRequest xml:lang="en-US">
  <AccessLicenseNumber>5B531C212348B520</AccessLicenseNumber>
  <UserId>XMLUser</UserId>
  <Password>Ship2A5</Password>
</AccessRequest>
<? xml version="1.0">
<LabelRecoveryRequest>
      <Request>
            <TransactionReference>
                  <XpciVersion Version = "1.0002"/>
            </TransactionReference>
            <RequestAction>LabelRecovery</RequestAction>
      </Request>
      <LabelSpecification>
            <LabelPrintMethod>
                  <Code>GIF</Code>
            </LabelPrintMethod>
            <LabelImageFormat>
                  <Code>GIF</Code>
            </LabelImageFormat>
      </LabelSpecification>
      <ReferenceNumber>
            <Value>abcdef</Value>
      </ReferenceNumber>
      <ShipperNumber>abc123</ShipperNumber>
</LabelRecoveryRequest>
```

Label Recovery Response Output

DTD Definition

< !ELEMENT LabelRecoveryResponse (Response , LabelResults*)>

Table 5:   Label Recovery Response Outputs

Name (Xpath)	Required/ Cardinality	Type	Length	Description/Value
LabelRecoveryResponse/ Response/ TransactionReference/ CustomerContext	No	Any	0..512	Customer provided data. May be XML. If this data is present in the request, it is echoed back to the customer.
LabelRecoveryResponse/ Response/ TransactionReference/ XPCIVersion	No	Alphanumeric	1..50	Identifies the version of the message. Current version is 1.0002
LabelRecoveryResponse/ Response/ResponseStatusCode	Yes	Numberic	1	Identifies the success or failure of the interchange. 1 = Success 0 = Failure
LabelRecoveryResponse/ Response/ ResponseStatusDescription	No	Alphanumeric	1..15	Describes the Response Status Code.
LabelRecoveryResponse/ Response/Error	No		Container	If an error is encountered during the interchange, the Response contains an error. If the error is present, then the ErrorSeverity and ErrorCode are required.
LabelRecoveryResponse/ Response/Error/ErrorSeverity	Yes	Alphanumeric	1..15	Describes the severity of the error.
LabelRecoveryResponse/ Response/Error/ErrorCode	Yes	Numberic	1..15	A numberic value that describes the error. Each tool defines a range of error codes. Refer to error conditions, in the appropriate chapter, for a complete list of interchange errors.
LabelRecoveryResponse/ Response/Error/ ErrorDescription	No	Alphanumeric	1..50	Describes the error code.

Table 5:   Label Recovery Response Outputs

LabelRecoveryResponse/ Response/Error/ MinimumRetrySeconds	No	Numeric	1..5	Number of seconds to wait until retry. This field is populated on special conditions of the Transient Error only, as defined by the service. A number between 1 and 86400 (24 hours)
LabelRecoveryResponse/ Response/ErrorLocation	No		Container	Identifies the element in error.
LabelRecoveryResponse/ Response/ErrorLocation/ ErrorLocationElementName	No	Alphanumeric	1..512	The Xpath name of the element in error. This is a valid Xpath pointing to an element in the request document.
LabelRecoveryResponse/ Response/ErrorLocation/ ErrorLocationAttributeName	No	Alphanumeric	1..50	The name of the attribute in error. This is the name of the attribute contained by the Error Location element.
LabelRecoveryResponse/ Response/ErrorLocation/ ErrorDigest	No	Alphanumeric	Bound by the size of the Request data.	The contents of the element in error.
LabelRecoveryResponse/ LabelResults	No Zero to Many		Container	Information containing the results of the users Label Recovery Request.
LabelRecoveryResponse/ LabelResults/TrackingNumber	Yes One	#PCDATA	18	Package Tracking number.
LabelRecoveryResponse/ LabelSpecification/ LabelImageFormat/Code	Yes One	#PCDATA	3	Code type that the label image is to be generated in. Valid value returned is GIF
LabelRecoveryResponse/ LabelImage/GraphicImage	Yes One	Base 64 Encoded	Variable Length	Base 64 encoded graphic image.
LabelRecoveryResponse/ LabelImage/HTMLImage	Cond One	Base 64 Encoded	Variable Length	Base 64 encoded html browser image rendering software. This is only returned for gif image formats.

Label Recovery Response Example

```
<? xml version="1.0">
<LabelRecoveryResponse>
       <Response>
              <TransactionReference>
                     <XpciVersion Version = "1.0002"/>
              </TransactionReference>
              <ResponseStatusCode>1</ResponseStatusCode>
              <ResponseStatusDescription>Success</ResponseStatusDescription>
       </Response>
       <LabelResults>
              <TrackingNumber>1ZE0E0970190020215</TrackingNumber>
              <LabelImage>
                     <LabelImageFormat>
                            <Code>GIF</Code>
                     </LabelImageFormat>

<GraphicImage>FSDJHSDJHJ3487EHNE9U8DY9VHRFV89SDFHFSDJHFSDIDFHSJKDFSJKDFSJIU9GFIUGJIFDUJG9U
KGLDJFDKJDGKJDFKGDJLDFKSJGKDFJDKGFDG9E0ERIJGE39IWURE9U9ER0UW9R0UR9WEGU9URE9WGUW90U90GRUG90
GERUG9REUGWERGJIOJGIODFGUIOFDUGIOFUIGRUE090U9TERUT90RUT9EU90ERUT9ERU9EUER9TUT9R0UTE90RU9TE
RU90RTEU9SDKHGJHGDFU</GraphicImage>

<HTMLImage>SKJJKLHGIGKHGKJHGFJGFJHDFJGHDDJFHFDJHFJHFJKDHJKFDHJFJDFHDFJHJDFHGJDHGDFSHJKFSDH
SDFJHFJSDHJKDFHFJKSHDSKJHGFDJSJDFSKSKJJKLHGIGKHGKJHGFJGFJHDFJGHDDJFHFDJHFJHFJKDHJKFDHJFJDF
HDFJHJDFHGJDHGDFSHJKFSDHSDFJHFJSDHJKDFHFJKSHDSKJHGFDJSJDFSKHGJKDS</HTMLImage>
              </LabelImage>
       </LabelResults>
</LabelRecoveryResponse>
```

Returns on the Web Error Conditions

Several errors can be encountered during the processing of Returns requests. Some errors are high in severity while others serve as warnings. The errors numbers are classified according to the table below.

Table 6:   Error Code Range

Error Code	Description
01xxxx	XML error.
02xxxx	Architecture error.
15xxxx	Tracking-specific error.

There are three levels of errors:

- Hard Error—Hard Errors represent the highest level of severity and signify that the entire XML request is invalid. Data modifications must be made to the document prior to re-sending. Possible causes of Hard Errors are XML format discrepancies, missing XML elements, invalid data, etc.
- Transient Error—Transient Errors may be recoverable when the XML request is re-sent. Data modifications are not necessary, but the XML request must be re-sent for attempted processing. Causes of Transient Errors include server connectivity or availability outages, database failure, system

Returns on the Web Programming Information   Returns on the Web Error Conditions

timeout, etc. Transient Errors are accompanied by a Minimum Retry Seconds element that specifies the duration of time required before the request can be re-sent.

- Warning—Warnings represent the lowest severity and are stated even though processing will continue.

When an error is encountered, it may affect multiple data elements. The user should inspect the Error/ErrorLocation/ErrorLocationElementName element included in the error to determine the name of the invalid element.

The error code can be found in the `<Response>` container which is part of every document returned by UPS OnLine XML Tools. The `<ResponseStatusCode>` will contain the error code and the `<ResponseStatusDescription>` will contain the natural language description.

```
<Response>
    <TransactionReference>
    <CustomerContext>AddressValidation</CustomerContext>
        <XpciVersion>1.0001</XpciVersion>
    </TransactionReference>
        <ResponseStatusCode>1</ResponseStatusCode>
        <ResponseStatusDescription>Success</ResponseStatusDescription>
</Response>
```

Table 7:   Returns on the Web Request/Response Error Conditions

Error Code	Error Severity	Description
10001	Hard	The XML document is not well formed
10002	Hard	The XML document is well formed but the document is not valid
120001	Transient	XML Shipping System is unavailable.
120002	Transient	Label generation unavailable.
120003	Transient	Unable to generate label.
120004	Transient	Unable to generate label html.
120005	Transient	UPS Internet Membership Services system is temporarily unavailable
120006	Transient	UPS Internet Membership Services system is temporarily unavailable
120010	Transient	Rating System is temporarily unavailable
120011	Transient	On Call Air Pickup system is temporarily unavailable
120012	Transient	Unable to validate the shipment
120020	Hard	Max packages per shipment exceeded.
120050	Hard	Illegal RequestAction
120051	Hard	Illegal RequestOption
120099	Hard	Validation Error: (Description)
120100	Hard	Missing/invalid shipper number

Table 7:   Returns on the Web Request/Response Error Conditions

120101	Hard	Missing/Invalid shipper name
120102	Hard	Missing/Invalid shipper address line 1
120103	Hard	Invalid shipper address line 2
120104	Hard	Invalid shipper address line 3
120105	Hard	Missing/Illegal ShipperCity
120106	Hard	Missing/Illegal ShipperStateProvCode
120107	Hard	Missing/Illegal ShipperPostalCode. (Description)
120108	Hard	Missing/Illegal Shipper/Address/CountryCode
120109	Hard	Missing/Illegal Shipper/PhoneNumber
120110	Hard	Missing/Illegal Shipper/AttentionName
120111	Hard	Shipment/Shipper/EmailAddress cannot exceed a length of 50 characters
120112	Hard	Shipment/Shipper/EmailAddress is an invalid format
120113	Hard	Shipper number must contain alphanumeric charaters only
120114	Hard	Shipper/PhoneNumber/StructuredPhoneNumber/PhoneExtension cannot exceed the length of 4.
120115	Hard	Shipper/PhoneNumber must be at least 10 alphanumeric characters
120116	Hard	Shipper/PhoneNumber/StructuredPhoneNumber/ PhoneExtension must contain only numbers
120117	Hard	Shipper/PhoneNumber/StructuredPhoneNumber/ PhoneExtension is only available if the shipper is located in US, Puerto Rico or Canada
120118	Hard	Shipper/PhoneNumber/StructuredPhoneNumber/ PhoneExtension is only valid if a phone number is given
120119	Hard	Shipper phone number and phone extension together cannot be more than 15 digits long
120120	Hard	The country associated with Shipper/ShipperNumber must be the same as the shipments origin country
120121	Hard	Shipper/ShipperNumber is not an active account
120122	Hard	Cannot place a shipment with the shipper number given in Shipper/ShipperNumber because of its account type.

Returns on the Web Programming Information   Returns on the Web Error Conditions

Table 7:   **Returns on the Web Request/Response Error Conditions**

120200	Hard	Missing/Illegal ShipTo/CompanyName
120201	Hard	Missing/Illegal ShipTo/AttentionName
120202	Hard	Missing/Illegal ShipTo/Address/AddressLine1
120203	Hard	Illegal ShipTo/Address/AddressLine2
120204	Hard	Illegal ShipTo/Address/AddressLine3
120205	Hard	Missing/Illegal ShipTo/Address/City
120206	Hard	Missing/Illegal ShipTo/AddressStateProvCode
120207	Hard	Missing/Illegal ShipTo/Address/PostalCode. (Description)
120208	Hard	Missing/Illegal ShipTo/Address/CountryCode
120209	Hard	Missing/Illegal ShipTo/PhoneNumber
120210	Hard	Shipment/ShipTo/EmailAddress cannot exceed a length of 50 characters
120211	Hard	Shipment/ShipTo/EmailAddress is an invalid format
120212	Hard	ShipTo/PhoneNumber/ StructuredPhoneNumber/ PhoneExtension cannot exceed the length of 4.
120213	Hard	ShipTo/PhoneNumber must be at least 10 alphanumeric characters
120214	Hard	ShipTo/PhoneNumber/ StructuredPhoneNumber/ PhoneExtension must contain only numbers
120215	Hard	ShipTo/PhoneNumber/ StructuredPhoneNumber/ PhoneExtension is only available if the shipper is located in US, Puerto Rico or Canada
120216	Hard	ShipTo/PhoneNumber/ StructuredPhoneNumber/ PhoneExtension is only valid if a phone number is given
120217	Hard	ShipTo phone number and phone extension together cannot be more than 15 digits long
120300	Hard	Missing/Illegal ShipFrom/CompanyName
120301	Hard	Missing/Illegal ShipFrom/AttentionName
120302	Hard	Missing/Illegal ShipFrom/Address/AddressLine1
120303	Hard	Illegal ShipFrom/Address/AddressLine2
120304	Hard	Illegal ShipFrom/Address/AddressLine3
120305	Hard	Missing/Illegal ShipFrom/Address/City

Table 7:   Returns on the Web Request/Response Error Conditions

120306	Hard	Missing/Illegal ShipFrom/Address/ StateProvCode
120307	Hard	Missing/Illegal ShipFromPostalCode. (Description)
120308	Hard	Missing/Illegal ShipFrom/Address/CountryCode
120309	Hard	Missing/Illegal ShipFrom/PhoneNumber
120310	Hard	Shipment/ShipFrom/ EmailAddress cannot exceed a length of 50 characters
120311	Hard	Shipment/ShipFrom/ EmailAddress is an invalid format
120312	Hard	ShipFrom/PhoneNumber/ StructuredPhoneNumber/ PhoneExtension cannot exceed the length of 4.
120313	Hard	ShipFrom/PhoneNumber must be at least 10 alphanumeric characters
120314	Hard	ShipFrom/PhoneNumber/ StructuredPhoneNumber/ PhoneExtension must contain only numbers
120315	Hard	ShipFrom/PhoneNumber/ StructuredPhoneNumber/ PhoneExtension is only available if the shipper is located in US, Puerto Rico or Canada
120316	Hard	ShipFrom/PhoneNumber/ StructuredPhoneNumber/ PhoneExtension is only valid if a phone number is given
120317	Hard	The ShipFrom country must be the same as the Shipper country
120318	Hard	ShipFrom phone number and phone extension together cannot be more than 15 digits long
120400	Hard	The shipment is missing payment information.
120401	Hard	Missing/Illegal PaymentInformation/Prepaid/ BillShipper
120402	Hard	Missing/Illegal PaymentInformation/Prepaid/ BillShipper/CreditCardType
120403	Hard	Missing/Illegal PaymentInformation/Prepaid/ BillShipper/CreditCardNumber
120404	Hard	Missing/Illegal PaymentInformation/Prepaid / BillShipper/CreditCard/ ExpirationDate
120406	Hard	Mismatch Credit Card Type/CreditCard/Number

Table 7:   Returns on the Web Request/Response Error Conditions

120407	Hard	The credit card you have provided in PaymentInformation/Prepaid/ BillShipper/ CreditCard has expired
120408	Hard	Missing BillShipper/CreditCard/Type
120409	Hard	Error validating backup credit card
120410	Hard	One payment method allowed for PaymentInformation/Prepaid/ BillShipper
120411	Hard	PaymentInformation/Prepaid/ BillShipper/ CreditCard is not allowed for shipments whose origin is not US or Puerto Rico
120412	Hard	Missing/Invalid PaymentInformation/ Prepaid/ BillShipper/ AccountNumber
120413	Hard	The shipper number PaymentInformation/ Prepaid/BillShipper/ AccountNumber cannot be billed because the account in not active
120414	Hard	Credit card authorization failed, contact your financial institution
120415	Hard	PaymentInformation/Prepaid/BillShipper/ AccountNumber must be the same shipper number as Shipper/ShipperNumber
120500	Hard	Missing/Illegal Service/Code
120501	Hard	Invalid Shipment/ReferenceNumber/ Value
120502	Hard	Invalid ShipmentServiceOptions/ InsuredValue/ MonetaryValue
120503	Hard	Shipment/Description must not exceed the length of 35 characters
120504	Hard	InvoiceLineTotal is not allowed for this shipment
120505	Hard	Saturday Delivery Option cannot be used for this shipment
120506	Hard	Invalid Shipment/ReferenceNumber/ Code
120508	Hard	Missing/Invalid ShipmentServiceOptions/ OnCallAir/Pickup/PickupDate
120509	Hard	Invalid Shipment/ ShipmentServiceOptions/ InsuredValue/MonetaryValue
120510	Hard	Invalid/Missing ShipmentServiceOptions/ OnCallAir/PickupDetails/ LatestPickupTime

Table 7:   Returns on the Web Request/Response Error Conditions

120511	Hard	Invalid ShipmentServiceOptions/ OnCallAir/ PickupDetails/PickupDate or Invalid ShipmentServiceOptions/ OnCallAir/ PickupDetails/ EarliestPickupTime or Invalid ShipmentServiceOptions/ OnCallAir/ PickupDetails/ LatestPickupTime
120512	Hard	Shipment/Description is required for this shipment.
120513	Hard	The first Email Address used for Email Shipment Notification exceeds the maximum length of 50 characters.
120514	Hard	Invalid format for first Email Address used for Email Shipment Notifcation
120515	Hard	ShipmentServiceOptions/ ShipmentNotification/ EMailMessage/Memo cannot exceed the length of 150 characters
120516	Hard	The first Email Address used for Email Shipment Notification is missing or contains invalid characters
120517	Hard	The second Email Address used for Email Shipment Notification exceeds the maximum length of 50 characters
120518	Hard	The format of the second Email Address entered in for Email Shipment Notification is invalid
120519	Hard	The second Email Address entered in for Email Shipment Notification is missing or contains invalid characters
120520	Hard	For a shipment, the maximum number of Email Addresses allowed for Email Shipment Notifications is 2
120521	Hard	For a shipment, the maximum number of Memos allowed for Email Shipment Notifications is 1
120522	Hard	Invalid Shipment/ AlternateDeliveryTime
120523	Hard	Shipment/DocumentsOnly is invalid with the shipments orgin/destination pair
120524	Hard	Package Pickup Request is not available with this shipment's service
120525	Hard	AlternateDeliveryTime must be between (valid start time) and (valid end time)
120526	Hard	InvoiceLineTotal/ MonetaryValue may not exceed the length of 8

Returns on the Web Programming Information .. Returns on the Web Error Conditions

Table 7:   Returns on the Web Request/Response Error Conditions

120527	Hard	Cannot use multiple types of currency in a shipment
120528	Hard	A shipment can have only one type of UnitOfMeasurement for Dimensions
120529	Hard	A shipment can have only one type of UnitOfMeasurement for a Weight
120530	Hard	ShipmentServiceOptions/ OnCallAir/ PickupDetails/ SuiteRoomID length cannot exceed 8 characters
120531	Hard	ShipmentServiceOptions/ OnCallAir/ PickupDetails/ FloorID length cannot exceed 3 characters
120532	Hard	ShipmentServiceOptions/ OnCallAir/ PickupDetails/ Location length cannot exceed 11 characters
120533	Hard	ShipmentServiceOptions/ OnCallAir/ PickupDetails/ EarliestTimeReady is required
120534	Hard	ShipmentServiceOptions/ OnCallAir/ PickupDetails/ LatestTimeReady is required
120535	Hard	ShipmentServiceOptions/ OnCallAir/ PickupDetails/ ContactInfo/Name is required
120536	Hard	ShipmentServiceOptions/ OnCallAir/ PickupDetails/ContactInfo/ PhoneNumber is required
120537	Hard	Invalid/Missing ShipmentServiceOptions/ OnCallAir/PickupDetails/ EarliestPickupTime
120538	Hard	On Call Air Pickup Error, (further description is provided in XML)
120539	Hard	InvoiceLineTotal/ MonetaryValue is required and must be a whole number
120540	Hard	On Call Air Pickup is not available for this shipment
120541	Hard	Shipment/ReferenceNumber is not allowed for this shipment
120542	Hard	Package/ReferenceNumber is not allowed for this shipment
120543	Hard	No more than 2 Shipment/ReferenceNumber can be given per shipment
120544	Hard	No more than 2 Package/ReferenceNumber can be given per package

Table 7:   Returns on the Web Request/Response Error Conditions

120545	Hard	Shipment/Description is not valid with this shipment
120546	Hard	(UOM Weight) is not a valid unit of measurement for weight.
120547	Hard	(UOM Dimension) is not a valid unit of measurement for dimensions.
120548	Hard	A shipment cannot have a KGS/IN or LBS/CM as its unit of measurements
120600	Hard	Missing Package/PackageType/Code
120601	Hard	Missing/Illegal Package/PackageWeight/Weight
120602	Hard	Missing/Illegal Combination of Package/Dimensions
120603	Hard	Illegal Package/Reference/Value
120604	Hard	Illegal PackageServiceOptions /InsuredValue/MonetaryValue
120605	Hard	Mismatch PackageDimensions/ PackageType
120606	Hard	Mismatch PackageDimensions/ PackageType/ PackageWeight
120607	Hard	Illegal Package/Reference/Code
120608	Hard	Package/PackageWeight/Weight is required
120609	Hard	All Package Dimensions are required and each must be greater than 0
120610	Hard	Invalid PackageServiceOptions/COD/CODAmount/MonetaryValue
120611	Hard	PackageServiceOptions/ VerbalConfirmation/ ContactInfo/Name cannot exceed a length of 35
120612	Hard	PackageServiceOptions/ VerbalConfirmation/ ContactInfo/PhoneNumber cannot exceed the length of 15
120613	Hard	PackageServiceOptions/ VerbalConfirmation/ ContactInfo/PhoneNumber must be at least 10 alphanumeric characters
120614	Hard	PackageServiceOptions/ VerbalConfirmation/ ContactInfo/PhoneNumber/ StructuredPhoneNumber/ PhoneExtension cannot exceed the length of 4
120615	Hard	PackageServiceOptions/ VerbalConfirmation/ ContactInfo/PhoneNumber/ StructuredPhoneNumber/ PhoneExtension must contain numbers only

Returns on the Web Programming Information   Returns on the Web Error Conditions

Table 7:   Returns on the Web Request/Response Error Conditions

120616	Hard	Package/PackageWeight/Weight cannot exceed a length of 5
120617	Hard	PackageServiceOptions/ InsuredValue/ MonetaryValue cannot exceed a value of 999
120618	Hard	PackageServiceOptions/ VerbalConfirmation/ ContactInfo/Name/ is required for verbal confirmation of delivery
120619	Hard	PackageServiceOptions/ VerbalConfirmation/ ContactInfo/PhoneNumber is required for verbal confirmation of delivery
120620	Hard	Package/PackageWeight, Package/ DimensionalWeight, Package/OversizePackage and Package/Dimensions do not apply to UPS Envelopes
120621	Hard	PackageServiceOptions/InsuredValue/ MonetaryValue cannot be greater than (Monetary Amount) (Currency Code)
120622	Hard	Package/Description is required
120623	Hard	Invalid Package/Description
120624	Hard	A Return Shipment can only have one package
120625	Hard	Invalid/Missing Package/ReturnService/Code
120626	Hard	Invalid PackageServiceOptions/COD/ CODFundsCode
120627	Hard	Invalid PackageServiceOptions/COD/CODCode
120628	Hard	Invalid PackageServiceOptions/ EMailAction/ NotificationCode
120629	Hard	Invalid PackageServiceOptions/LabelDelivery/ EMailMessage/EMailAddress
120630	Hard	Invalid PackageServiceOptions/LabelDelivery/ EMailMessage/UndeliverableEMailAddress
120631	Hard	Invalid PackageServiceOptions/LabelDelivery/ EMailMessage/Memo
120632	Hard	Invalid PackageServiceOptions/LabelDelivery/ EMailMessage/Subject
120633	Hard	Invalid ShipmentServiceOptions/Notification/ EMailMessage/FromEMailAddress
120634	Hard	Invalid ShipmentServiceOptions/PNotification/ EMailMessage/EMailAddress
120635	Hard	Invalid ShipmentServiceOptions/Notification/ EMailMessage/UndeliverableEMailAddress

Table 7:   Returns on the Web Request/Response Error Conditions

120636	Hard	Invalid ShipmentServiceOptions/Notification/ EMailMessage/Memo
120637	Hard	Invalid ShipmentServiceOptions/ Notification/ EMailMessage/Subject
120638	Hard	Invalid PackageServiceOptions/Notification/ EMailMessage/ReplyToEMailAddress
120639	Hard	Invalid PackageServiceOptions/Notification/ EMailMessage/EMailAddress[1]
120640	Hard	Invalid PackageServiceOptions/Notification/ EMailMessage/EMailAddress[2]
120641	Hard	Invalid PackageServiceOptions/Notification/ EMailMessage/UndeliverableEMailAddress
120642	Hard	Invalid PackageServiceOptions/Notification/ EMailMessage/Memo
120643	Hard	Invalid PackageServiceOptions/Notification/ EMailMessage/Subject
120644	Hard	PackageServiceOptions/ LabelDelivery is not valid with the shipment's return service type
120645	Hard	ShipmentServiceOptions/ Notification is not valid with the shipment's return service
120646	Hard	Invalid PackageServiceOptions/ LabelDelivery/ EMailMessage/FromName
120647	Hard	Invalid ShipmentServiceOptions/ Notification/ EMailMessage/FromName
120648	Hard	Invalid PackageServiceOptions/Notification/ EMailMessage/FromName
120649	Hard	Invalid ShipmentServiceOptions/ Notification/ NotificationCode
120650	Hard	Invalid PackageServiceOptions/ Notification/ NotificationCode
120700	Hard	Missing/Illegal LabelSpecification/ LabelPrintMethod/Code
120701	Hard	Missing/Illegal LabelSpecification/ HTTPUserAgent
120702	Hard	Missing/Illegal LabelSpecification/ LabelImageFormat/Code
120703	Hard	Missing/Illegal Combination of LabelSpecification/ LabelStockSize
120704	Hard	Missing/Invalid LabelSpecification/ LabelStockSize/Height

Table 7:   Returns on the Web Request/Response Error Conditions

120705	Hard	Missing/Invalid LabelSpecification/LabelStockSize/Width
120801	Hard	Address Validation Error on Shipment/Shipper/Address
120802	Hard	Address Validation Error on Shipment/ShipTo/Address
120803	Hard	Address Validation Error on Shipment/ShipFrom/Address
120804	Warning	Address Validation Warning on Shipment/Shipper/Address. (Description)
120805	Warning	Address Validation Warning on Shipment/ShipTo/Address. (Description)
120806	Warning	Address Validation Warning on Shipment/ShipFrom/Address (Description)
121000	Hard	Hazardous Materials packages cannot weigh over 70 pounds.
121005	Hard	The COD option cannot be combined with the Return Services option.
121010	Hard	Hazardous materials cannot be shipped using the Return Services option.
121015	Hard	The Saturday Delivery option cannot be combined with the Return Services option.
121020	Hard	The Delivery Confirmation option cannot be combined with the Return Services option.
121025	Hard	The maximum insured amount is $50,000.
121030	Hard	Packages must weigh more than zero pounds.
121031	Hard	Packages must weigh more than zero KG unit of measurement
121035	Hard	The package weight cannot be greater than the service's max weight.
121036	Hard	The value of Package/PackageWeight/Weight cannot be greater than the service's max weight using KG unit of measurement
121040	Hard	The Return Services accessories are unavailable with this service.
121045	Hard	The Saturday Delivery option is unavailable with the given service.
121047	Hard	Saturday Delivery may not be combined with a package type for the given product.

Table 7:   Returns on the Web Request/Response Error Conditions

121050	Hard	Package exceeds the maximum size total constraints of 130inches or 330 centimeters (length + girth, where girth is 2 *(width + height)).
121055	Hard	This package exceeds the maximum length constraint of 108 inches.
121056	Hard	Package/Dimensions/Length cannot exceed the max length of 270cm
121057	Hard	The measurment system used is not valid for the shipFrom country
121060	Hard	Hazardous materials cannot be shipped in a UPS Letter.
121063	Hard	Accessorial cannot be shipped with the selected service. See digest for details.
121065	Hard	Shipment of Hazardous Materials to the given destination is unavailable.
121070	Hard	Accessorial is not allowed with certain access.methods. See digest for details.
121075	Hard	The international declared value accessory is not valid with a domestic service.
121080	Hard	The domestic declared value accessory is not valid with a international service.
121085	Hard	The accessory cannot be added to the product. See digest for details.
121086	Hard	Only one Authorized Return Service option is allowed.
121087	Hard	The Authorized Return Service option is not allowed for shipments.
121090	Hard	The package's zone is invalid for the product
121091	Hard	Extended area surchage is unavailable with this service.
121095	Hard	A zone cannot be determined for the package
121100	Hard	The selected service is invalid for the origin.
121105	Hard	The given accessory key is invalid for the origin.
121106	Hard	The specified country, origin or dest, is not supported.
121107	Hard	A blank origin postal was specified.
121108	Hard	Shipments must have at least 1 package.
121109	Hard	The Delivery Area Surcharge Tier looked up is invalid

Returns on the Web Programming Information   Returns on the Web Error Conditions

Table 7:   Returns on the Web Request/Response Error Conditions

121110	Hard	Typically indicates a syntax error in the cfg file
121115	Hard	The COD amount must be greater than zero
121120	Hard	The COD amount cannot exceed $1,000 when a cashiers check or money order is requested.
121125	Hard	The COD amount cannot exceed $50,000.
121130	Hard	The Saturday Pickup option cannot be combined with the Return Services option.
121135	Hard	The Saturday Pickup option cannot be combined with the Saturday Delivery option.
121140	Hard	Saturday Pickup is unavailable with the selected service.
121145	Hard	Only one Delivery Confirmation accessory is allowed per package.
121150	Hard	Delivery confirmation is unavailable with the selected service.
121155	Hard	The COD option is unavailable with the selected service and/or with the shipments origin/destination pair.
121160	Hard	The accessory is invalid with the billing option. See digest for details.
121165	Hard	The Verbal Confirmation of Delivery option cannot be combined with the Return Services option.
121170	Hard	The Delivery Confirmation option cannot be combined with the Verbal Confirmation of Delivery option.
121175	Hard	Verbal Confirmation of Delivery is unavailable with the selected service.
121180	Hard	Consignee Billing is unavailable with the selected service.
121185	Hard	The selected service is unavailable to the desired country
121190	Hard	Only one Return Services option is allowed.
121195	Hard	The selected billing option is unavailable with the selected service.
121196	Hard	The selected billing option is unavailable with UPS Letters.
121198	Hard	The requested Hundredweight option is unavailable with UPS Letters

Table 7: Returns on the Web Request/Response Error Conditions

121200	Hard	Saturday Delivery is unavailable to desired destination.
121205	Hard	Additional Handling is unavailable with the selected service.
121206	Hard	Additional Handling is unavailable with UPS Letters.
121210	Hard	The selected service is not available to the given destination.
121211	Hard	Rating Error: (Description)
121212	Hard	Package/PackagingType/Code is invalid in a shipment from the origin to the destination
121213	Hard	The billing option used in the shipment is unavailable in a from the origin to the destination
121214	Hard	UPS cannot ship from the origin country to the destination country
121215	Hard	The selected service is not available to residential destinations.
121220	Hard	The Ship Notification option cannot be combined with the Return Services option.
121225	Hard	Return Services are unavailable to the given destination.
121230	Hard	Next Day Air Early AM Surcharge is unavailable with the selected service.
121231	Hard	Switzerland Domestic Container must weigh greater than 2 KG
121232	Hard	Worldwide Express Plus from Europe to Switzerland must be UPS Envelope or document only
121233	Hard	Next Day Air Early AM is unavailable with the Hundredweight
121235	Hard	No more than # of < accessory list> may be selected simultaneously.
121240	Hard	Accessory name may not be applied more than # times. See digest for details.
121245	Hard	Saturday Pickup and Shipper Duty Fees cannot be applied to the same package.
121250	Hard	Saturday Delivery and Shipper Duty Fees cannot be applied to the same package.
121255	Hard	Shipper Duty Fee is unavailable with the selected service.

Table 7:   Returns on the Web Request/Response Error Conditions

121260	Hard	Shipper Duty Fee is unavailable with the selected billing option.
121261	Hard	Accessory may not be combined with the product See digest for details.
121262	Hard	Accessory may not be combined with the accessory. See digest for details.
121265	Hard	The selected billing option is unavailable to the desired country.
121266	Hard	The currency type used is not legal tender in the origin country
121270	Hard	An invalid table or column name is used in SELECT .. WHERE
121275	Hard	An error occurred adding a new rave attribute. See digest for details.
121280	Hard	An error occurred removing a rave attribute. See digest for details.
121285	Hard	The given postal code is invalid for the given state
121286	Hard	The given state abbrev is invalid for the given country
121290	Hard	The given billing option is invalid
121295	Hard	A package of shipment has error. See digest for details.
121300	Hard	Shipper Pays Duty - Tax Unpaid is unavailable with the selected accessorial.
121305	Hard	Shipper Pays Duty - Tax Unpaid is unavailable with the selected service.
121310	Hard	Shipper Pays Duty - Tax Unpaid is unavailable with the selected billing option.
121315	Hard	The Authorized Return Service is unavailable with the selected accessorial. See digest for details.
121320	Hard	The Authorized Return Service is unavailable with the selected service.
121325	Hard	The Authorized Return Service is unavailable with the selected billing option.
121330	Hard	The Certificate of Origin is unavailable with the selected accessorial. See digest for details.
121335	Hard	The Certificate of Origin is unavailable with the selected service.

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Table 7:   Returns on the Web Request/Response Error Conditions

121340	Hard	The Certificate of Origin is unavailable with the selected billing option.
121345	Hard	The Shipper Export Declaration is unavailable with the selected accessorial. See digest for details.
121350	Hard	The Shipper Export Declaration is unavailable with the selected service.
121355	Hard	The Shipper Export Declaration is unavailable with the selected billing option.
121360	Hard	The Worldwide Express Plus Surcharge is unavailable with the selected service.
121363	Hard	The One Time Pickup Surcharge is unavailable with the selected service.
121365	Hard	Accessorial is not available with the selected access method. See digest for details.
121370	Hard	Invalid access method. See digest for details.
121375	Hard	Letter service is invalid for shipments with more than 1 package.
121380	Hard	Package service does not match shipment service
121385	Hard	Package billing option does not match shipment billing option
121390	Hard	Package billing tier does not match shipment billing tier
121395	Hard	Package consignee does not match shipment consignee
121400	Hard	Package consignee street address line 1 does not match shipment consignee street address line 1.
121405	Hard	Package consignee street address line 2 does not match shipment consignee street address line 2.
121410	Hard	Package consignee street address line 3 does not match shipment consignee street address line 3.
121415	Hard	Package city does not match shipment city
121420	Hard	Package state does not match shipment state
121425	Hard	Package postal code does not match shipment postal code
121430	Hard	Package country does not match shipment country
121431	Hard	All packages in the shipment must have the same UPS Shipper Number.

Returns on the Web Programming Information   Returns on the Web Error Conditions

Table 7:   Returns on the Web Request/Response Error Conditions

121435	Hard	All packages in the shipment must have the Saturday Delivery option if 1 package has it
121440	Hard	All packages in the shipment must have the Saturday Pickup option if 1 package has it
121445	Hard	UPS does not allow Hazardous Materials in shipments consisting of more than one piece.
121447	Hard	UPS does not allow Hazardous Materials in Hundredweight shipments
121450	Hard	Only one type of Return Service option is allowed per package.
121453	Hard	Hundredweight is not valid with Return Service options
121455	Hard	All packages in the shipment must have the Return Services option if 1 package has it.
121456	Hard	All packages in the shipment must have the Residential option if 1 package has it.
121457	Hard	Shipments with the Residential option set must have the Residential option set on all packages.
121460	Hard	Shipments cannot exceed a COD amount of $5,000 when requesting a cashiers check or money order.
121465	Hard	Package access method does not match the shipment access method.
121470	Warning	Invalid UPS Hundredweight tier. See digest for details.
121500	Hard	Special rates are unavailable for the selected service using the selected package types..
121501	Hard	Rating Error: (Description)
121510	Hard	Unsupported package type type.
121511	Hard	Unsupported accessory type
121512	Hard	Unsupported billing option
121513	Hard	Unsupported option
121515	Warning	Weight of (actual weight) exceeds maximum for rating the requested container. Using standard package rates.
121519	Hard	Package rating category does not match the shipment rating category.
122000	Hard	Do not allow both oversize1 and oversize2 on the same package.
123005	Warning	(Description)

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Table 7:   Returns on the Web Request/Response Error Conditions

123010	Warning	Package(s) in this shipment contains a warning: (Description)
123020	Warning	The shipment's origin postal code given in ShipFrom/Address/PostalCode is an invalid postal code for the origin
123021	Warning	The shipment's destination postal code given in ShipTo/Address/PostalCode is an invalid postal code for the destination
125000	Hard	Missing or invalid shipment digest.
129000	Warning	Oversize1 indicator has automatically been set on a Package.
129001	Warning	Additional Handling has automatically been set on Package (index of the package).
129002	Warning	An Extended Area surcharge of (monetary value) has been added to the service cost.
129003	Warning	The requested service may not guarantee Next Day arrival to the selected location
129004		Check the UPS Service Guide for supported Saturday delivery destinations within the selected country
129005	Warning	The requested service may not guarantee Second Day arrival to the selected location
129006		The Second Day Air service may not guarantee Second Day arrival to the selected location
129007	Warning	Oversize2 indicator has automatically been set on a Package
129008	Warning	Weight is between 30 lbs and 69 lbs, oversize1 has automatically been set on a Package.
129009	Warning	Oversize1 does not apply, and has automatically been removed from a package.
129010	Warning	Oversize2 does not apply, and has automatically been removed from a package.
129011	Hard	The maximum insured value amount for the 1-Attempt option is 999 USD
129012	Hard	The maximum insured value amount for the Print and Mail option is 999 USD
120913	Hard	The maximum insured value amount for the Print Return Label option is 999 USD
120914	Hard	The maximum insured value amount for the Electronic Delivery option is 999 USD

Returns on the Web Programming Information Returns on the Web Error Conditions

Table 7: Returns on the Web Request/Response Error Conditions

120915	Hard	The maximum insured value amount for the 3-Attempt option is 999 USD
20001	Hard	General process failure
300001	Hard	Non-unique combination of shipper number and reference number - Candidate List returned
300002	Hard	Return label for shipment already physically scanned
300003	Hard	Return shipment can have only one package.

Table 8: Void Error Conditions

Error Code	Error Severity	Description
190001	Transient	Void not available at this time.
190002	Transient	Invalid/Missing registration ID.
190030	Hard	XML is not well formed.
190100	Hard	Invalid or missing ShipmentIdentificationNumber.
190101	Hard	Time for voiding has expired.
190102	Hard	Multiple Shipments Found with Same Shipment ID or no shipment found.

XML OnLine Tools
I$_1$ Interface Specification

Document XOLT
Version 1.0.3

Date: Monday, February 19, 2001

EXHIBIT D

Document History

Revision	Author(s)	Date	Comments
1.0.0	Geoff Chalmers	12/4/2000	Initial document.
1.0.1	Geoff Chalmers Mark Hall	12/9/2000	Review changes: added HTTPContext object, move XPCI Request/Response processing into I1; exception handling
1.0.2	Mark Hall	12/13/2000	
1.0.3	Geoff Chalmers	2/18/01	Fix grammar

1. Overview

Starting with the Address Validation project it has become increasingly clear that XOLT needs to provide a consistent internal interface for its tools and components. Since many users outside of XOLT will come to depend on our components, every effort should be made to reduce coupling between us. Therefore, this interface's most salient feature lies in that the communication between the caller and component uses XML documents. As an additional benefit, this same interface may be employed throughout the XOLT suite with little expected change.

The name is based on the nomenclature developed in the AV project:

I_0 – The public XML interface. Accessible from the Internet, it includes the HTTP wrapper, the Licensing and Access XML *document*, and the XPCI Request/Response *document*.
I_1 – The internal XML interface. Does not include the Licensing and Access XML document and may only be reached from inside the firewall.
I_2 – Germane only to the AV project (so far).

1 Basic Rules of the Game

1. I_1 must be XPCI compliant and, if it exists, a proper subset of I_0. This means I_1 will be responsible for handling the XPCI Request and Response containers.

2. For every I_1 interface there will be a DTD and/or schema describing the XML documents passed in and received in return although a validating parser will not be employed.

3. The XML documents that are passed through a particular implementation of I_1 are the true nuts and bolts of the relationship between the caller and the component. The individual component technical specifications are responsible for detailing the XML document elements, structure, and related business rules.

4. Changes to the XML documents passed back and forth through I_1 should be backward compatible wherever possible. Alteration of the value of Pi (Π) is the only legitimate excuse for breaking this rule.

2 Assumptions

The I_1 interface assumes

a) The caller is in-process (if and until EJB's become a reality)
b) The caller is written in Java

3 Programmatic Interface

The I_1 interface is designed to pass in one or more XML documents in a single string and similarly return one or more XML documents. The I_1 interface will, in order to prepare for the eventual adoption of EJB, will employ a factory style interface.

3.1 Class Name: <Component>Factory

The factory constructs an <Component>Component object and returns it to the caller. The sole purpose of the factory is to hide the implementation details of the <Component>Component object. This allows the <Component> object to be distributed and scaled without the knowledge of the calling application.

3.2 Constructor Summary

- none

3.3 Public Methods

```
<Component>Component get();
```
This method returns a component object instance to the caller.

```
Void release (<Component>Component component);
```
This method returns the <Component>Component back to the <Component>Factory. Once the method call returns to the client, the client should not use the <Component>Component instance with first getting a new instance from the factory.

3.4 Class Name: <Component>Component

Constructor Summary

```
<Component>Component <Component>Component();
```

This method constructs a component object. This method should not be called directly. The factory object should be used to construct the component.

Public methods

```
StringBuffer <Component>Request (String sRequesterID,
                                 String sVersion,
                                 Hashtable processOptions,
                                 StringBuffer xml);
```

This method will provide component services as detailed in the individual component documentation.

> sRequesterID – the name of the requesting process. Examples:
> *WWTNT*
> *Supply Ordering*

> sVersion – The version identifier (e.g., "1.01")

> processOptions – This object is a hash table containing name/value pairs of processOptions that are not contained in the XML.

> For example, a processOptions key/value that is necessary for certain Tools is HTTPContext.

> HTTPContext = key, HTTPContext = value -This HTTP Context object contains a hash table containing the name/value pairs that come from the HTTP Session. If I$_1$ is NOT called by an XML Tool, then the caller is responsible for setting up the following name/value pairs, should they be required by a specific implementation of I$_1$:

xml<Component>Request – the component Request document as an XML string. Please see the DTD for details.

The follow is an example of how to create the hash table and add an element:

```
processOptions = new Hashtable();
processOptions. put. ("HTTPContext",
    newHttpContext().setRemoteUser("ImsUserID");
```

Returns:
The component response XML document as an XML string is returned.

3.5 Errors, Warnings, and Exceptions

The I_1 implementation class is responsible for processing errors into the XPCI <Response> container and throwing an exception. Warnings will not result in a thrown exception. Two exceptions will be thrown, one for the XML 1.0 Standard related issues, the other for business issues:

com.ups.olt.component.exceptions.OLTXMLException – the <Component>Component::request method cannot process the XML request document because:
    a) XML document is not well formed,
    b) XML document is not valid according to the relevant DTD (see below).
com.ups.olt.component.exceptions.OLTBusinessProcessException – the underlying business logic has detected one or more errors.

Both of the above classes will be derived from com.ups.olt.component.exceptions.OLTException and will contain the following:
    Appropriate XPCI response document – because the return value is not passed when an exception is thrown, this is required to provide I_0 classes with the correct XML response.
    Error Number – as assigned by the class implementing I_1.
    Error Severity – x = Hard, y = Transient , z= Whatever
    Error Description – I_1 will be responsible for supplying this description in the language in effect for the request object as specified by *xml:lang* (the default is *en-US*).

The following URL gives the description of the usage of these classes

http://xmldev2.ismd.ups.com/I1/tree.html

3.6 XML Validity

The XML document passed in the <Component>Component::request method must be valid according to a DTD that accompanies a particular component definition but the XML document must NOT include a <!DOCTYPE *[root element] [...declarations...]* > statement. Which is to say, the DTD should specify *standalone=yes*.